DLA-90-P90136

Administrative and Holding Costs
Resulting from Processing Reports
of Discrepancy

OPERATIONS RESEARCH AND ECONOMIC ANALYSIS OFFICE



DEPARTMENT OF DEFENSE

DEFENSE LOGISTICS AGENCY

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of Discrepancy

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DLA-LO

FOREWORD

The Defense Logistics Agency (DLA) Directorate of Contracting requested DLA's Operations Research and Economic Analysis Office (DLA-LO) to quantify the costs incurred by DLA and other Department of Defense (DoD) activities, as a result of the receipt of discrepant items from contractors and the resulting submission of Reports of Discrepancies (RODs). This report summarizes all efforts involved in the analysis and presents the results in tabular form for use by supply center contracting directorates.

We were able to quantify two costs resulting from the receipt of a discrepant item - the administrative cost and holding cost. analysis showed that the expected administrative cost for actions that encompass ROD processing, investigation, and resolution is \$227 for a packaging ROD and \$189 for a shipping ROD for a typical item managed by DLA. The analysis also showed that the "average" holding cost per packaging ROD is 3.22 percent of the contract value for a typical DLAmanaged item. The corresponding holding cost accumulated for a shipping ROD is 3.57 percent of the contract value. The sum of the administrative and holding costs represents a "minimum" total ROD cost. There are many other costs associated with the receipt of discrepant items that we could not quantify in monetary terms. Administrative and holding costs were calculated for individual supply center and for items identified by Federal Supply Class. The results are presented in a fashion readily adaptable for implementation at each supply center.

The primary recommendation is to test the application of evaluation factors based on these cost estimates during the bid evaluation process at the supply centers. These evaluation factors will aid in purchasing "best value" and determining the "true" cost to the government of doing business with each offerer. Thus, a more prudent choice - a more cost-effective decision - can be made.

POGER C ROY

Assistant Director

Policy and Plans

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EXECUTIVE SUMMARY

The Packard Commission has recommended that the government conduct its purchasing operations in a fashion similar to that of the private sector by emphasizing quality and schedule in addition to price. The Defense Logistics Agency's (DLA) Directorate of Contracting is examining the possibility of quantifying the costs associated with poor contractor performance and incorporating these costs into the bid evaluation process. In support of this effort, the DLA Operations Research and Economic Analysis Office (DLA-LO) has been tasked with evaluating the cost associated with discrepant supplies that are attributable to contractor fault.

This study examines two elements of the cost of discrepant items and the resulting Report of Discrepancy (ROD) processing: specifically, the administrative cost and the holding cost. The administrative cost arises from actions normally performed at various supply and staff levels (internal and external to DLA) when a discrepant item or shipment is discovered and an ROD is initiated, processed, investigated and resolved. The holding cost results from the storage and handling of discrepant items and from the lost opportunity of investment for money tied-up in these supplies.

The average administrative cost accumulated for a single packaging ROD for a typical DLA item is \$227. The average holding cost per packaging ROD is estimated as 3.22 percent of the contract value for a typical DLA item. The administrative cost for a shipping ROD is assessed at \$189, with a corresponding holding cost of 3.57 percent of the contract value for a DLA item. The administrative cost (in dollars) and holding costs (expressed as a proportion of contract value) were derived for items identified by Federal Supply Class and by individual supply center. These sets of results are the products of this study.

Although this study is comprehensive, it is not all-inclusive. As many costs as possible were quantified, although there are many other costs associated with the receipt of discrepant items that we could not quantify, such as maintenance during equipment downtime and readiness degradation. However, an update will inevitably be needed in the future to account for changes of costs in personnel wages and materiel prices. In conjunction with this upgrade, the possibility of capturing any of these additional costs will be reevaluated.

In the comparison of two or more bids for a particular item, the contracting officer at a center may calculate "evaluation factors" for each potential contractor based on the contractor's ROD history and contract data. A "true" cost to the government of doing business with each offerer can be better assessed using these factors. A more prudent choice - a more cost-effective decision - can be made.

It is recommended that the cost estimates developed in this report be tested/used as bid evaluation factors at one or more of the supply centers.

I. INTRODUCTION

Background. The Packard Commission, in a report entitled "Quest for Excellence" (April 1986), recommended that the government adopt commercial buying practices in lieu of simply awarding a contract to the The Air Force and some Defense Logistics Agency (DLA) activities have experimented with a "blue ribbon" contractor program. example, the Defense Electronics Supply Center (DESC), Defense Construction Supply Center (DCSC) and Defense Industrial Supply Center (DISC) have awarded contracts with up to a 20 percent price differential above the low bidder to contractors with a proven track record of timely deliveries and consistently conforming material. DLA Operations Research and Economic Analysis Office (DLA-LO) Project DLA-89-81012, Administrative and Holding Costs Resulting from Processing Reports of Nonconforming Supplies (July 1989), quantified the average total additional cost for the receipt of poor quality items and the resulting complaint processing to be the sum of two independent costs. These individual costs were computed to be \$501 for administrative efforts and 3.54 percent of the average contract value representing the holding cost for a typical DLA-managed item. Yet there is still no analytically-based estimate of the cost (to either the ultimate user or to the DLA system) of the initiation, processing and resolution of a report of discrepancy (ROD). (Used for nonconformances of shipment and packaging, rather than of the products themselves. See section ID below.)

B. Problem Statement

There are several facets to measuring a contractor's quality of performance. The cost of late deliveries is one of these facets. The cost of a receipt of nonconforming items is another. The cost of a ROD is still another. The administration required for ROD initiation, processing, investigation and resolution can be measured in terms of "dollars." Also included in costs are several components such as the cost incurred for holding items in stock at various supply levels and the cost of "money" being suspended in materiel until ROD resolution occurs.

Two directly measurable costs concerning discrepant supplies can be readily captured. One such cost represents the total administration performed at various levels within DLA and the Department of Defense (DoD) agencies when an ROD for an item is initiated and processed. Another cost is that resulting from the presence of discrepant material and the money it "locks up" - the holding cost described above. The cost of a ROD becomes the sum of the <u>administrative</u> and supply <u>holding</u> costs incurred between ROD initiation and ROD resolution. Both costs are identified and quantified in this report.

C. Objectives

The objective of this study is to provide an estimate of the costs associated with the receipt of a discrepant item. Specifically, this study determines the cost of the discrepancy reporting process from its inception (when a problem is discovered) and its processing through various DoD, DLA and individual service activities. Actions for <u>all</u> activities that normally play a part in the process are quantified in monetary terms.

Another goal of this study is to determine the average holding cost per ROD resulting from the receipt of a discrepant item. The intent was to estimate these costs for individual items identified by Federal Supply Class (FSC) and the managing DLA Supply Center.

In this study, the single cost generated for an ROD, encompassing both holding and administrative components, may be interpreted as the <u>minimum cost</u> for an ROD. The process analyzed in this project encompasses only the essential information transfers, investigative efforts, and resolution actions for a typical ROD - this study measures the cost for all actions that <u>should</u> occur, not necessarily all actions that <u>could</u> occur.

Two general classifications of RODs are considered. Administrative and holding cost formulations will be separately provided for both <u>packaging</u> and <u>shipping</u> RODs.

D. Scope

This study focuses on the entire reporting process when a problem in a shipment occurs at any one of the four supply levels. The discovery of a discrepancy and the initiation of a report may arise from a customer (ultimate user of the item), a retail supply activity (in direct support of customers), a service wholesale supply activity (or service depot), and a DLA depot. Separate analyses are accomplished for each of these four ROD initiation levels.

The DLA supply centers analyzed include DCSC, DESC, Defense General Supply Center (DGSC) and DISC. The Defense Personnel Support Center (DPSC) is regarded as being comprised of two subcenters for this project - Medical (DPSC (Med)), and Clothing and Textile (DPSC (C&T)). The subsistence mission of DPSC and the entire DLA fuel management mission at the Defense Fuel Supply Center are excluded.

An ROD is the device utilized by service activities and other DoD agencies (including DLA depots) to report any problems or discrepancies other than nonconforming material. Submission of this report occurs at all echelons - the ultimate user, the retail supply activity, or a wholesale supply source - depending upon what level detects the discrepant item or shipment. Specifically, this analysis concentrates on any report transaction that involves an SF 364, the actual Report of Discrepancy form.

Two major classifications of RODs will be addressed in this study:

1. <u>Packaging ROD</u>. This type of report is initiated for items or shipments that have, upon receipt, improper preservation, packing, marking or unitization. Packing discrepancies encompass specific problem areas such as incorrect or poor blocking, bracing, cushioning, weathering, reinforcing or application of various protective measures.

2. Shipping ROD. Shipping RODs are of several general subcategories. One type of shipping ROD is that reflecting the condition of materiel - but not one that would address nonconforming materiel. Included in the "Condition or Damage" subcategory of shipping RODs are those processed for damaged freight, pilferage, vandalism, theft, expired shelf-life, or inappropriate condition code. The "Documentation" subcategory of shipping discrepancies encompasses missing, illegible, mutilated, incomplete or improper documentation that applies to a specific shipment or receipt of supplies. The "Misdirected" subcategory of discrepancies simply includes situations in which an organization received a shipment that should have been provided to some other unit, or supply source, or other customer activity. The "Wrong Item" subcategory of discrepancies includes many different (but related) individual problems. These include unidentifiable items, unacceptable substitutes for requested items, unit-of-issue incompatibility, mixed stock and several other minor discrepancies. The "Overage" subcategory reflects situations in which the number of items actually received by an activity (for a given request) is greater than the quantity requisitioned or demanded for a particular transaction. The "Shortage" discrepancies, similarly, reflect situations in which the quantity received is less than the number requested for a given supply transaction.

In this study, any shipment or individual supply item having a discrepancy for which an ROD would be submitted is termed a "discrepant item." Discrepant items here do <u>not</u> include those supplies which would cause the initiation of a quality deficiency report or any other form of quality complaint. These quality discrepancies have been addressed in Project DLA-89-81012.

In this project, the total administrative cost associated with the processing of an ROD will include the costs of determination of discrepancy; investigation; required coordination with contractor; response to disposition instructions for materiel; financial management involvement; and the general flow of information (both formal and informal). Scenarios involving each of the four supply levels an' each of the six DLA supply centers are analyzed.

There are two types of holding costs associated with material awaiting disposition instructions that are generated by ROD resolution. The first is the cost of lost opportunity for investment. The second cost is called the "pure" supply cost.

1. Lost Opportunity Cost. During the period of time an ROD is being investigated - the time between complaint initiation and ROD complaint closure - the discrepant supplies may be "frozen." An exception to this situation is the "overage" subcategory of shipping RODs. Since an item which has an ROD issued against it is in a suspense mode, the money invested in this particular item is also "tied up." If this money were allowed to "grow," a profit (theoretically) would be achieved, depending upon the period of time that the money is invested. In the scenario of this project, the time that the ROD is in effect, and the value of the items in suspense, can be combined to form a cost of lost opportunity of investment.

2. <u>Pure Supply Cost.</u> The other type of cost is that associated with the holding of physical inventory within a storage facility. The suspended materiel occupies valuable floor or bin space within a depot or retail supply activity. Materiel handling equipment is utilized to segregate suspended stocks. Facilities and other materiel support efforts are involved when discrepant stocks are present. These costs representing other than pure personnel salaries (which are included as administrative costs) - are computed in this project. The sum total of all expenses incurred with the physical presence of discrepant stocks in a storage facility over time is the pure supply cost.

Finally, and very importantly, RODs - regardless of the type of discrepancy, the originator level, or the involved supply center - can be resolved with the "blame" or responsibility placed at various storage or management activities within the Department of Defense. However, only RODs which were ultimately determined to be the fault of the supply contractor were analyzed in this project.

II. CONCLUSIONS

The ROD cost equations are provided in Table 1 for packaging RODs and in Table 2 for shipping RODs. In this study, the average ROD cost is termed the "evaluation factor" (EF). Each formula represents the sum of the average cost of ROD processing and the average cost for holding material for a typical item managed by each center—For any given proposed contract value, the evaluation factor can be generated. The use of these equations will be demonstrated in paragraph V, IMPLEMENTATION.

Table 1
PACKAGING ROD INDIVIDUAL CENTER RESULTS

	Evaluation						Factor
Admin. <u>Center</u>	Holding Cost <u>Per Complaint</u>	-	Contract <u>Cost</u>	+	Proportion	x	<u>Value</u>
DCSC	EF	-	\$165		(.053243	ĸ	\$)
DESC	EF	-	\$162		(.023726	x	\$)
DGSC	EF		\$211		(.036682	x	\$)
DISC	EF	-	\$145		(.113587	x	\$)
DPSC(C&T)	EF	-	\$433		(.018375	x	\$)
DPSC(Med)	EF	-	\$238		(,082260	x	\$)

Table 2
SHIPPING ROD INDIVIDUAL CENTER RESULTS

	Evaluation		•			Factor
Admin.	Holding Cost		Contract	D.,		77 1
<u>Center</u>	Per Complaint	-	<u>Cost</u> +	Proportion	X	<u>Value</u>
DCSC	EF	-	\$191	(.030064	x	\$)
DESC	EF	-	\$187	(.043886	x	\$)
DGSC	EF	-	\$181	(.025119	x	\$)
DISC	EF	-	\$186	(.037890	x	\$)
DPSC(C&T)	EF	-	\$235	(.007160	x	\$)
DPSC(Med)	EF	-	\$133	(.ù32090	x	\$)

The evaluation factor formula for a typical DLA item (averaging over all commodities and supply centers) was also developed for both packaging and shipping RODs. The DLA-wide packaging evaluation factor (EF) is:

Similarly, the DLA-wide shipping ROD formula is:

EF =
$$$189 + (.035717 \times $Proposed Contract Value)$$

Both evaluation factors resulted from an appropriate weighting of individual center results based on the relative frequency of discrepant material occurrences for each supply center.

More detailed evaluation factor formulas were also produced in this study. Appendix A contains packaging ROD EF formulas for FSCs within each DLA supply center. In a similar fashion, the shipping ROD EF formulas are given in Appendix B by supply center and FSCs within each supply center.

- III. <u>RECOMMENDATIONS</u>. It is recommended that the evaluation factors based on the cost estimates developed in this study be tested/used at the contracting directorates of one or more DLA supply centers. A list of items that have had numerous discrepancies, and a list of contractors having high rates of ROD occurrence, should be developed. The resulting lists for both the problem items and the poorer contractor performers should be combined to generate occasions for which the process would be a viable and meaningful contract cost evaluation procedure.
- IV. <u>BENEFITS</u>. The implementation of these evaluation factors will provide a more accurate estimate of the cost of doing business with contractors who have had a history of problems. Hopefully, by using these evaluation factors, DLA will be able to buy "best value" and thus make more cost-effective contract award decisions. In addition, from a broader perspective, contractors who have had less than a "perfect" ROD history

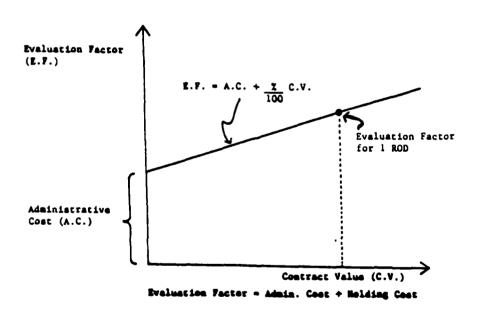
will be motivated to tender the highest quality performance to DLA. The average number of packaging RODs per year is 9,114 which results in an estimated cost of \$2.8 million per year. The average number of shipping RODs per year is 6,441 which results in an estimated cost of \$1.9 million per year. By buying "best value," \$4.7 million per year in non-value added costs could be eliminated, as an upper limit.

V. <u>IMPLEMENTATION</u>

The evaluation factor (EF) tables, attached as the appendices to this report, will be available to the appropriate contracting officers at the DLA supply centers. The evaluation factor - expressed as the sum of the two cost components - is graphically displayed in Figure 1; the relationship of both administrative and holding costs to a proposed contract value is evident.

Figure 1

EVALUATION FACTOR DETERMINATION



The administrative cost is calculated as a fixed cost for each FSC. The holding cost, however, is variable. It is represented as a proportion of the proposed contract value for a particular item identified within an FSC. The holding cost percentage is also "rolled up" for each center.

The key element of information needed to assess the evaluation factor for a contractor is the <u>average number</u> of packaging or shipping RODs (per contract) experienced for a particular contractor for a specific type of item within an FSC or managing center. The number of RODs can be accessed directly from the Quality Evaluation Program, or the Customer Depot Complaint System (CDCS) by the Center Contracting Directorate or through coordination with the Center Quality Assurance Directorate. Once this figure is determined, the evaluation factor is readily calculated.

An example will highlight the implementation procedure. References will be made to the appropriate attached appendix for the required figures:

A firm offers \$20,000 for a contract containing items falling under the FSC of 5320. This firm has an average of 3 shipping RODs and 1.5 packaging RODs per contract in the past year for FSC 5320 items. Calculate the total evaluation factor for RODs, and the "true" cost of this proposal.

Packaging ROD

Administrative Costs	- \$ 143
(ection)
Holding Costs (.110410) x (\$	520,000) - \$2,208
Evaluation Factor per ROD \$143 + \$2208	- \$2,351
Total Evaluation Factor for Packaging RODs	;
(1.5 RODs) x (\$	= \$3,527

Shipping ROD

Administrative Costs				-	Ş	183
(Costs retrieved from Appendix B	- DISC					
Section)						
Holding Costs	(.034746)	x	(\$20,000)	-	\$	695
Evaluation Factor per ROD	\$183	+	\$695	-	\$	878
Total Evaluation Factor for	r Shipping	ROD	S			
	(3 RODs	s)	x (\$878)	-	\$2	,634

True Cost of Contract

```
Original Offer + Total EF (Packaging ROD) + Total EF (Shipping ROD)
- $20,000 + $3,527 + $2,634 - $26,161
```

For this particular firm, an offer of \$20,000 is expected to cost the government \$26,100 based on this firm's ROD history. This "true" cost may be utilized in comparison with other firms bidding for the same type item.

VI. METHODOLOGY

A. Administrative Costs

The numerical analysis concentrates on the flow of an ROD which is precipitated by the receipt of a discrepant item(s) by a customer or a retail or wholesale supply activity. Administrative cost results have been reported in Section II for individual centers and all of DLA for both packaging and shipping RODs. Major results for each FSC managed by each supply center are contained in the two appendices to this report.

Three independent analyses were conducted. The first analysis measures the expected cost of an ROD to a complaint initiator. The second analysis captures the cost of ROD processing for each supply center. The final analysis determines the expected cost for participation of activities within Defense Contract Administration Services (DCAS). The total expected cost of an ROD will be the sum of the three individual expected costs.

The first portion of the method for computing the administrative cost identifies the material flow of items managed by DLA, purchased from the contractor, and provided to the customer. The main "players" in the supply system are identified and a relative frequency (or probability) is assigned to each of the branches in a diagram representing flow of material.

At <u>each</u> of the supply activities which plays a part in the storage and distribution of DLA managed items (DLA depots, service depots, supporting supply activities, and ultimate users), an individual cost analysis is conducted. This addresses the administrative costs incurred <u>if</u> a discrepant item is received by a given activity and <u>if</u> a ROD is subsequently initiated by this activity.

At each supply center, a detailed analysis is conducted which measures the degree of participation (via probabilities) for each center activity which plays a part in the processing and resolution of a ROD. These center agencies include the focal point, quality assurance directorate, comptroller office, contracting and production directorate, and supply operations directorate. The application of activity costs and involvement probabilities produces the expected value for each center's participation. A cost is developed for each of the six supply centers and each of the two types of RODs.

The expected cost for DCAS elements is also measured via actual costs (if involvement occurs) and probabilities (reflecting relative participation). This cost is captured for each individual DLA-managed item identified by FSC.

For each of the three independent analyses, the individual activity costs are based on the time to perform identified tasks, the rank or wage grade of the person performing the tasks, the hourly pay rate (with leave, benefits, fatigue and other factors applied), and the relative frequency of the tasks performed. An expected cost of the total of all administrative actions applicable to a single ROD is the result of this study. Costs presented are based on Fiscal Year 1989 pay scales.

B. Holding Costs

The calculation of pure supply costs and lost opportunity costs used certain published factors which were handled as interest or growth rates in the computations. These rates are published in DLAM 7041.1, "Economic Analysis" (May 1985) and in the latest version of "Review of SAMMS Requirements Computations" (DLA-LO Project 3040, August 1985).

Each ROD on the Customer Depot Complaint System (CDCS) was individually considered. A value for the pure supply cost, the lost opportunity cost, and the total holding costs was generated for each ROD record. In all cases, a value for each type of cost was computed taking into account the total dollar value of all items on a single ROD, the appropriate rate, and the time period that the ROD was being investigated and resolved.

Averages of all costs were made for each individual FSC and DLA supply center. The total holding cost was then expressed as a proportion of average contract value for a given FSC.

Development of Data. The quantitative information utilized in this analysis was developed from Special Purpose Data (SPD) standards for DLA activities; responses to detailed surveys for agencies that do not have published performance standards (service customer units, retail supply organizations, and service depots); interviews with and visits to agencies that are involved with materiel and information flow; accumulated performance data submitted by the individual supply centers to the DLA Directorate of Quality Assurance; and historical data from the DLA Integrated Data Bank files and other locally constructed computer data Additionally, ROD records currently reflected on the CDCS were utilized to develop a mailing list for surveys to various levels in the wholesale and retail supply chain. The CDCS was also a valuable source of performance and transaction data for RODs processed by supply centers. Information from the accumulated Active Contract Files (ACF) was used in the holding cost portion of the analysis. Lastly, Quality Assurance Management Information System data were employed to analyze appropriate quality efforts at the DCAS level.

VII. ANALYSIS

A. Detailed Computations

There were many stages of computation which led to the tables attached as appendices. The administrative costs were identified and quantified in a "back-up" analysis to this report, "Cost of Processing Reports of Discrepancy; Part I: Administrative Costs." The development of holding costs was provided in another supplemental report, "Cost of Processing Reports of Discrepancy; Part II: Holding Costs." Hereafter, these reports are referred to as Part I and Part II. The <u>final results</u> of both back-up analyses are combined to form the tables in the appendices and in paragraph II, CONCLUSIONS.

B. Materiel Flow

The flow of materiel from the contractor through the supply system was the first step in estimating the relative frequencies that were associated with finding and reporting discrepant materiel found at all levels in the supply chain. The basic flow of materiel is displayed in Figure 2. A contractor may ship DLA items to a DLA depot or to any of the service depots. It may be economically advantageous and more efficient if the contractor ships directly to an appropriate retail supply activity - the source of supply for the ultimate user or requisitioner. This certainly applies in the situation in which items are not normally stocked at DLA depots. These types of supplies are purchased by DLA for direct delivery to customers.

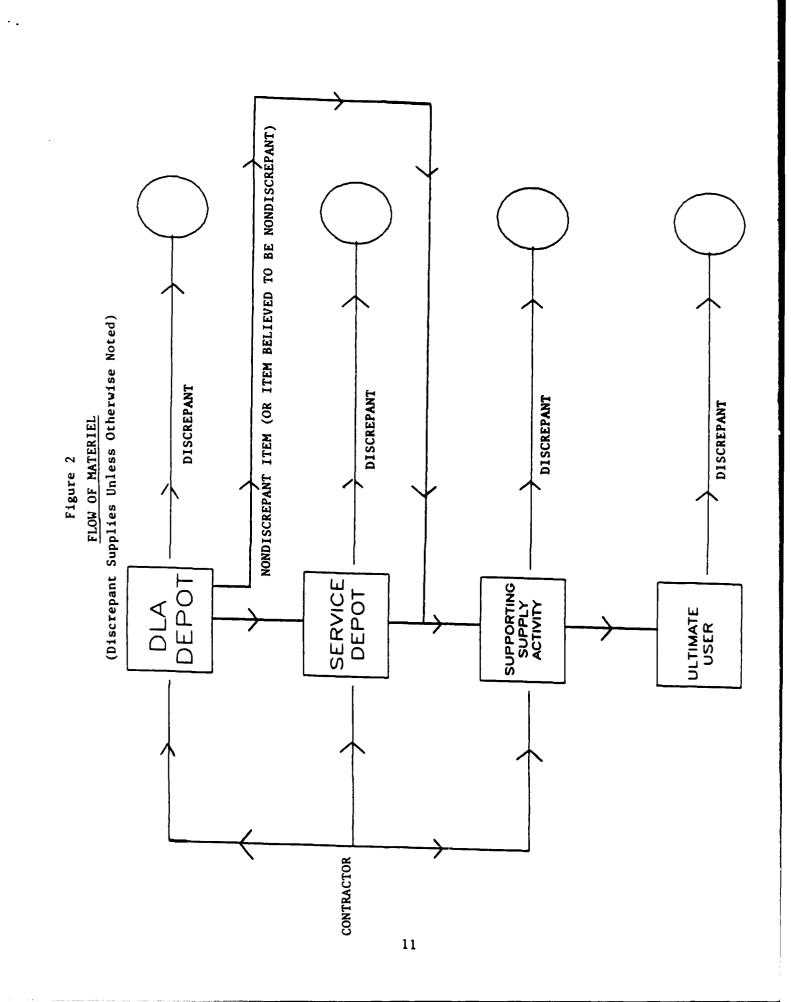
A DLA depot may ship to a service depot or to a retail support activity. A DLA depot may also discover a discrepant item or shipment during inspection by the receiving division. A service depot, receiving supplies directly from a contractor or DLA depot, may ship an item to a supporting supply activity if this item is believed to be "error-free." However, a service depot may also discover a discrepant item and, as a result, prevent shipment to other supply activities. A supporting supply activity or retail supply point may receive items from a DLA depot, a service depot, or directly from a contractor. In any case, it ships to the ultimate user or the requisitioner of the item - this requisitioner will actually use the item for the purpose for which it was designed. Some examples of retail supply activities are Army supply and service companies, Air Force base supply activities, or Navy supply ships. Both the supporting supply activities and the ultimate users have the opportunity to discover a discrepant item.

The first step of the analysis was the determination of the proportions (probabilities) of discrepant and nondiscrepant items at each level of supply. A complete analysis describing the material flow to various supply levels via branch probabilities was provided in Part I of the detailed analysis. Part I provides interim results that were utilized to describe discrepant material occurrence at each supply center.

C. Cost Calculation Descriptions

Once a nonconforming item is discovered, the reporting process commences. Costs are accumulated at many and diversified activities as the ROD proceeds through the administrative chain. The calculation of the ROD cost depends upon who initiates the ROD as well as which supply center manages a particular item. Costs were captured for each of the four complaint initiators for a typical item at each of the six DLA supply centers.

Any ROD process beginning at any supply level may involve many other staff activities. The number of participants in the ROD flow depends upon the complexity of the problem, impact on customers, dollar value of the discrepant items, and other factors. These staff activities may involve focal points, action points, contract administration representatives, and many other organizations and individuals. Costs associated with all of these staff elements were developed.



The "expected cost" value of a particular supply level's involvement is simply the product of the calculated probability (representing the participant's involvement) and the administrative cost experienced when that supply level is involved. The expected cost of the administration performed in the initiation of and response to an ROD was computed by evaluating the expected cost of each activity of a decision or probability tree that represents the ROD process, and subsequently summing these costs.

Similar actions take place at each supply center when an ROD surfaces to that level. The procedures followed were assumed to be defined in the appropriate SPD standards. However, since each center is oriented to major commodity groupings, some variability in expended ROD processing time may be inherent. For example, the administrative and investigative efforts required for certain repair parts may be substantially greater than those necessary to resolve RODs for a commercial, "off-the-shelf," item. As a result, each center's activities were individually analyzed.

For each item (identified by FSC), the total expected administrative cost was analyzed (and reported) by component costs. Individual cost estimates, each of which represents the administrative cost for one ROD for a particular center, were developed. Lastly, a single value that represents the costs of a typical ROD for a DLA item - averaging over all ROD initiators and all supply centers - was derived through appropriate weighting of each supply center cost with discrepant item occurrence probabilities.

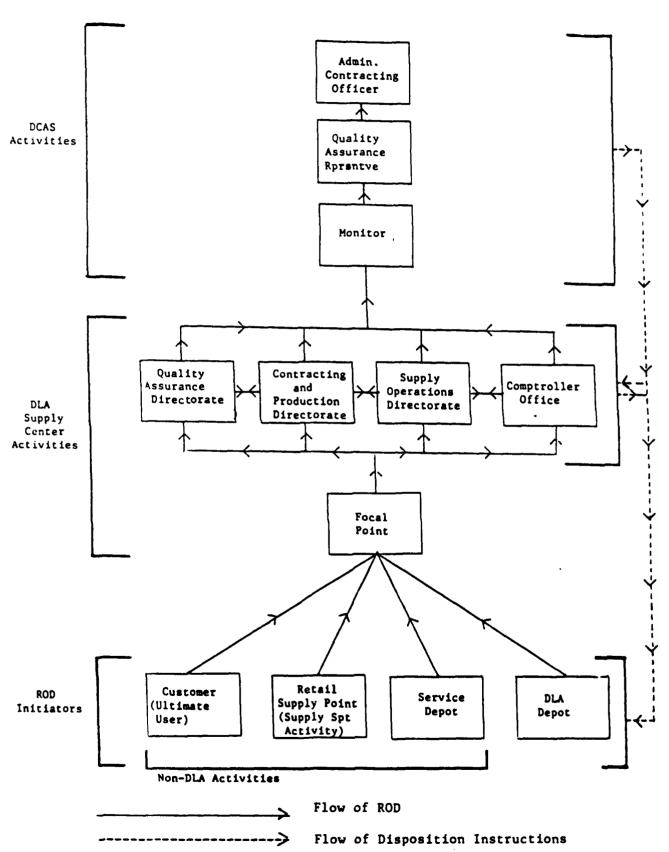
D. Administrative Cost Determination

Tracing the ROD flow was the first step in accumulating individual activity costs. The reporting and resolution process is extremely complicated. This complexity arises from the attempt to ensure that the ROD resolution occurs at the lowest level possible, that complete and correct information is always transferred from one activity to another, and that the ROD initiator is satisfied in the most expeditious fashion. The flow of the ROD and other management information is depicted in Figure 3. This is a very streamlined process as depicted. In reality, there are many other lines of information transfer that commonly occur in the resolution of an ROD.

The process may begin with a customer activity. This is the ultimate user of the item - the unit or organization that directly feels the effects of a receipt of a discrepant item - since this customer's need for the item had placed a demand on the supply system. Upon receipt of a discrepant item, the customer performs tasks that were detailed in one of the three surveys utilized to solicit information. The cost estimates developed for every function performed by a customer included appropriate consideration of leave and fringe benefit costs and factors such as personal fatigue and work delay. In all cases where information was derived from survey results, the median cost - not the average or mean cost - was utilized. Using the median of all individual survey results provides a better cost estimate by eliminating the risk of a few extremely high or low costs affecting the entire sample.

Figure 3

ROD RESOLUTION PROCESS



The costs associated with customer units involve two "phases" or two groups of transactions. The first phase involves the discovery of the discrepant materiel and the construction and submission of the ROD. The second phase involves responding to instructions regarding the disposition of the materiel in conjunction with the resolution of the ROD. This situation also applies for supporting supply activities and service depots. The instructions are then funneled to the customer, retail supply point or service depot. It will be assumed that <u>if</u> an activity initiates an ROD, that activity <u>will</u> eventually be provided instructions to handle the discrepant materiel.

The supporting supply activity or retail supply point may initiate its own report if a discrepant item is detected upon receipt. The supporting supply activity receives, stores, and issues stock at the retail supply level directly in support of an intended user. A service depot operating at the wholesale supply level may receive and issue DLA managed items. A service depot, therefore, may detect a discrepant item and initiate an ROD. Information on detailed tasks normally performed at a retail supply point and at a service depot was obtained from surveys of these activities. Costs were again calculated based on the time expended and the associated grade of the person performing each task.

A DLA depot communicates a problem directly to a particular supply center depending upon the commodity affected. The actions that a depot normally takes are detailed in SPD standards. In addition to using the SPD standards, the actual flow of information and material within Defense Depot Richmond Virginia (DDRV) was studied in great detail. In developing the cost estimates, the process at DDRV was considered to be representative of the process at all DLA depots. To calculate the costs accumulated with the receipt of a discrepant item at a DLA depot, both sources of information were utilized.

The point in the supply center that receives the discrepancy for control, entering the data into the CDCS data base, and distribution, is the focal point. Although the focal points at the supply centers may be organizationally located in either the supply operations directorate or the quality assurance directorate, they perform the same function. DLA SPD standards formed the basis for all computations of costs within the focal point. These standards provide a detailed description of tasks performed by the focal point.

The four major supply center ROD processing points are the Contracting and Production Directorate, the Supply Operations Directorate, the Quality Assurance Directorate, and the Comptroller Office. The degree of participation of these center activities depends upon the complexity and nature of the ROD - each ROD is managed individually once it is accepted into the center by the focal point. SPD standards and calculated transaction probabilities (via CDCS) combined to produce the expected cost of involvement for all center processing points. This was accomplished for each individual supply center. Detailed descriptions for each processing activity are available in the set of SPD standards used in this study. A general outline of functions that are commonly performed by center processing point activities is provided in Part I of this project.

Relative frequencies or probabilities, reflecting the proportion of time certain actions occurred, were obtained from SPD Standards and the CDCS data base. These probabilities included the proportion of time an ROD action was passed to a servicing Quality Assurance Representative (QAR) at DCAS for resolution. All probabilities were utilized to calculate expected costs for various activities both within a DLA supply center and at the DCAS level. Due to the anticipated variability in the numbers of transactions passed among supply center activities, and due to the variability of personnel grades among the different centers, each center's focal and ROD processing points were individually considered.

Once costs had been assigned to each activity in the ROD process, with probabilities of event occurrences established to reflect different scenarios, total costs were compiled. A "roll-up" or combined cost included <u>all</u> costs of all center activities involved with the distribution of both materiel and information.

Costs experienced at the DCAS level were then considered. Elements addressed were the QAR, the Administrative Contracting Officer (ACO), and the regional Deficiency Report Program Manager (DRPM) and the division DRPMs. Although SPD standards for the QAR were available, the estimate of costs associated with the QAR was developed in greater detail simply as a result of the wealth of information available on computer files, particularly the Mechanization of Contract Administrative Services data bases. The expected cost of DCAS involvement became the product of two quantities - the sum total of all individual activity costs at the DCAS level and the probability of DCAS involvement. Each FSC was analyzed separately for the DCAS portion of the analysis. Job descriptions (as they are related to complaint processing) for DCAS elements are referenced in Part I of the study.

The analysis contained in Part I produced a breakdown of administrative costs for each center and FSC. Costs were stratified by non-DLA activities (ultimate customers, retail supply points, service depots and screening points), DLA activities (all DLA supply center and supply depot elements) and DCAS activities (QAR, deficiency manager and ACO). The total of all administrative costs - experienced by all levels and activities - is that reflected in the appendices to the Part I report. Lastly, to arrive at an overall set of expected costs for non-DLA, DLA and DCAS activities that represent "global" ROD costs (across all centers), each non-DLA cost, DLA cost and DCAS cost was multiplied by the probability of ROD occurrence for that center. These results are also provided in Part I.

E. Holding Cost Determination

To calculate the holding cost, each record in the CDCS data base that was coded as an SF 364 was analyzed. An estimate of the material cost on the ROD was derived from the quantity involved in the ROD and the unit price of the particular item. This estimated cost represented the amount of money that was held in suspense awaiting ROD resolution and was utilized as a "principal" from which lost investment opportunity and pure supply costs were generated. Specifics of this analysis are explained in Part II of this project.

The cost rates for holding stock in a suspense mode differ from supply center to supply center. The source of these factors is the latest version of the "Review of SAMMS Requirement Computations," (DLA-LO Project 3040, August 1985). Table 3 displays these rates. No rates were published for DPSC. As an estimate, the average of the other center's rates was used.

Table 3

<u>Center</u>	Rate
DCSC	17 09

HOLDING COST RATES

DESC 25.0% DGSC 18.0% DISC 18.0% DPSC (C&T) 19.5%

DPSC (Med) 19.5%

The rates used for the cost of lost opportunity in this study is 10 percent. This figure is discussed in DLAM 7041.1, "Economic Analysis" and is referred to as a discount rate for DLA investments. This rate of return is considered to be the most representative overall investment parameter (at the present time). The difference between the total holding cost and the cost of lost opportunity provides the cost of pure supply actions.

All packaging RODs will accumulate a holding cost during ROD resolution. However, a holding cost is <u>not</u> associated with <u>all</u> shipping RODs. Overages, in this study, are assumed to be "exempt" from the cost of lost investment opportunity, since the "quantity over" does not reflect a purchase by the government.

In all cases, an estimate of each type of cost for each ROD was computed taking into account the total dollar value of all items on each ROD, the appropriate rate, and the time period that the ROD was being investigated and resolved. Only "closed" RODs - those which have been resolved - were considered in the analysis. Only RODs which were determined to result from "contractor fault" were reviewed. The duration of a ROD was able to be measured to the nearest day; therefore, compounding occurred on each day for the entire period that a ROD was in effect. Given that the total dollar value of items on an ROD is "T," the total worth of "TW" of the money committed to the supplies (if the money could have been invested for a period of "m" days) is:

$$TW = T (1 + r)^{m}$$
365

where "r" is the appropriate rate, in decimal form (for example, .10 for lost opportunity or .18 for total holding cost for a DGSC item). The cost experienced, $C_{\rm E}$, is the difference between this total worth after a period of "m" days and the initial worth "T":

$$C_E - TW - T$$

An example highlights the computational technique for calculating the total holding costs for material reflected on a complaint.

An ROD was reviewed for a DGSC item. The unit price of the item is \$32.50. The number of discrepant items for this ROD is 50. The ROD was initiated on Julian date 86280 and resolved on Julian date 87025. Determine the total holding cost for material on this complaint as follows:

Total Value of Materiel (T) \$32.50 per item x 50 items

- \$1,625

Total Duration Time of ROD (m)
The difference (in days) between
Julian dates 87025 and 86280

111 days

Rate (for DGSC) Expressed as Decimal (r)

- .18

Total Worth of Money (TW)

TW =
$$(\$1,625)$$
 $(1 + .18)$ 111 days 365

- \$1,716

Total Holding Cost Experienced (C_F)

$$C_E = $1,716 - $1,625$$

\$91

For this example, the total holding cost experienced by the government for the material on this ROD is \$91.

After computing holding cost values for each ROD, all dollar figures were summed to a specific FSC. Average costs (with respect to the number of RODs) were then calculated. The total holding cost was also expressed as a percentage of average contract value for each given FSC in the Part II report. The ACF was used to calculate an average contract value for each FSC to arrive at this percentage. The effect of a ROD in monetary terms is expressed as a proportion of the proposed contract value for a specific FSC. The product of this <u>proportion</u> and a proposed bid becomes the holding cost component of the EF formulas reported in this study. The process was repeated to obtain supply center results.

APPENDIX A

Packaging RODs Evaluation Factors

(By Center and FSC Within Center)

		EVALUATION						PRCPOSED	
FSC	CENTER	FACTOR PER	3	ADMINISTRATIVE	+	(PROPORTION X	CONTRACT)
		PCKGNG ROD		COST				VALUE	
1005	2000			4445			0 034344 W	•	
1005	DCSC	E.F.	=	\$165		(0.021211 X		
1010	DCSC	E.F.	*	\$165	+	(0.053243 X		
1015	DCSC	E.F.	*	\$165	+	(0.021564 X		_
1020	DCSC	E.F.	=	\$165	1	(0.036143 X		 '
1025	DCSC	E.F.	=	\$165	+	(0.191510 X 0.053243 X))•
1030	DCSC	E.F.	=	\$165	+ +	(0.042034 X		— ·
1095 1450	DCSC	E.F.	=	\$165 \$165	+	(0.011953 x		_,
	DCSC	E.F.	=	\$196	Ť	(0.048322 X		-,
1610 1615	DCSC	E.F.	=	\$196 \$196	+	(0.027911 X		_,
1620	DCSC	E.F.	=	\$196	+	(0.044225 X		',
1630	DCSC	E.F.	-	\$196	+	(0.014531 X		',
1650	DCSC	E.F.	=	\$196	+	ì	0.020338 X		<i>'</i>
1730	DCSC	E.F.	=	\$196	+	ì	0.026299 X		- ′,
1740	DCSC	E.F.	=	\$196	+	ì	0.004690 X		<i>'</i>
2010	DCSC	E.F.	2	\$165	+	(0.059486 X		<u>'</u>
2230	DCSC	E.F.	=	\$165	+	ì	0.053243 x		
2240	DCSC	E.F.	=	\$165	+	ì	0.250000 x		
2250	DCSC	E.F.	=	\$165	+	(0.053243 x		') *
2410	DCSC	E.F.	=	\$165	+	Ċ	0.053243 X)*
2420	DCSC	E.F.	=	\$165	+	(0.053243 X		
2510	DCSC	E.F.	=	\$154	+	(0.059374 ×		
2520	DCSC	E.F.	=	\$154	+	-	0.061396		
2530	DCSC	E.F.	=	\$154	+	(0.071995		
2540	DCSC	E.F.	=	\$154	+	(0.075780)		
2590	DCSC	E.F.	=	\$154	+	(0.100508	\$,
2620	DCSC	E.F.	#	\$165	+	(0.053243		—)*
2805	DCSC	E.F.	=	\$177	+	(0.059564))
2815	DCSC	E.F.	=	\$177	+	(0.079869)	\$)
2820	DCSC	E.F.	=	\$177	+	(0.053243	\$)*
2825	DCSC	E.F.	=	\$177	+	(0.051424)	(\$ <u> </u>)
2830	DCSC	E.f.	=	\$177	+	(0.053243)	\$)*
2850	DCSC	E.F.	2	\$177	+	(0.053243)	\$)*
2805	DCSC	E.F.	2	\$177	+	(0.053243)	S)*
2910	DCSC	E.F.	=	\$177	+	(0.058784 >	\$)
2920	DCSC	E.F.	2	\$177	+	(0.078380)		
2930	DCSC	E.F.	*	\$177	+	(0.061276	s	,
2940	DCSC	E.F.	=	\$177	+	•	0.089225 >	\$	
2990	DCSC	E.F.	*	\$177	+	(0.076818)	(\$	>
3010	DCSC	E.F.	=	\$174	+	(0.047801	s)
3020	DCSC	E.F.	*	\$174	+	(0.049604	\$)
3030	DCSC	E.F.	#	\$174	+	(0.061706	S)

^{*} There were no historical records reflecting closed packaging RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	=	ADMINISTRATIVE COST	•	(PROPORTION	x	PROPOSED CONTRACT VALUE	>
3040	DCSC	E.F.	=	\$174	+	(0.051947	x	\$)
3710	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
3720	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
3730	DCSC	E.F.	=	\$165	+	(0.053243	X	\$)*
3740	DCSC	E.F.	=	\$165	+	(0.012799	X	\$	_)
3760	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
3770	DCSC	E.F.	=	\$165	+	(0.026414	X	\$	_)
3805	DCSC	E.F.	=	\$165	+	(0.007389	X	\$	_)
3810	DCSC	E.F.	=	\$165	+	(0.001389	X	\$	_)
3815	DCSC	E.F.	=	\$165	+	(0.062563	X	\$	_)
3820	DCSC	E.F.	=	\$165	+	(0.047941		\$	_)
3825	DCSC	E.F.	=	\$165	+	(0.018695		\$	_)
3830	DCSC	E.F.	=	\$165	+	(0.086016		\$	_,
3835	DCSC	E.F.	=	\$165	+	(0.053243		\$	_)*
3895	DCSC	E.F.	=	\$165	+	(0.004733		\$	_,
3910	DCSC	E.F.	=	\$165	+	(0.033181		\$	_,
3915	DCSC	E.F.	=	\$165	+	(0.053243		\$)*
3930	DCSC	E.F.	=	\$165	+	(0.010841		`	_
3950	DCSC	E.F.	=	\$165	+	(0.034528			_'.
3960	DCSC	E.F.	=	\$165	+	(0.053243			<u>`</u> *
4210	DCSC	E.F.	=	\$177	+	(0.033074			—'
4220 4310	DCSC	E.F.	=	\$177	+	(0.024056 0.044157			-,
4310	DCSC	E.F. E.F.	=	\$177 \$177	+	(0.044137			'
4330	DCSC	E.F.	-	\$177 \$177	·	(0.039046			<u>`</u>
4410	DCSC	E.F.	=	\$165	·	(0.039931			
4420	DCSC	E.F.	=	\$165 \$165	•	(0.037731			
4430	DCSC	E.F.	=	\$165	•	(0.053243			/)*
4440	DCSC	E.F.	=	\$165	+	ì	0.022141		· ———	
4460	DCSC	E.F.	=	\$165	+	,	0.018158			
4510	DCSC	E.F.	=	\$156	+	ì	0.036025			— <u>'</u>
4520	DCSC	E.F.	=	\$156	+	ì	0.026248			
4530	DCSC	E.F.	=	\$156	+	Ċ	0.054823			_;
4540	DCSC	E.F.	=	\$156	+	Ċ	0.044197			
4610	DCSC	E.F.	=	\$165	+	(0.049584			
4620	DCSC	E.F.	=	\$165	+	Ċ	0.018110			
4630	DCSC	E.F.	=	\$165	+	(0.053243			
4710	DCSC	E.F.	=	\$156	+	Ċ	0.036445			
4720	DCSC	E.F.	=	\$156	+	Ċ	0.071824			
4730	DCSC	E.F.	*	\$156	+	(0.038654			
4810	DCSC	E.F.	=	\$161	+	(0.028971			_,
4820	DCSC	E.F.	=	\$161	+	(0.047571	X		>

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		PCKGNG ROD		COST					VALUE	
4910	DCSC	E.F.	=	\$161	+	(0.052089	x	\$	_)
4930	DCSC	E.F.	=	\$161	+	(0.056897	X	\$	_>
4940	DCSC	E.F.	=	\$161	+	(0.063154	X	\$	_)
5410	DCSC	E.F.	=	\$165	+	(0.015015	X	\$	_)
5411	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
5420	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
5430	DCSC	E.F.	=	\$165	+	(0.020590	X	\$	_)
5440	DCSC	E.F.	=	\$165	+	(0.039731	X	\$	_)
5445	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	_)*
5450	DCSC	E.F.	=	\$165	+	(0.044032	X	\$	_)
5510	DCSC	E.F.	=	\$163	+	(0.035234	X	\$	_)
5520	DCSC	E.F.	=	\$163	+	(0.053243	X	\$)*
5530	DCSC	E.F.	=	\$163	+	(0.063451	X	\$	_)
5660	DCSC	E.F.	=	\$165	+	(0.001081	X	\$	_)
5680	DCSC	E.F.	=	\$165	+	(0.053243	X	\$	>*

^{*} There were no historical records reflecting closed packaging RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	=	ADMINISTRATIVE COST	•	(PROPORTION	x	PROPOSED CONTRACT VALUE)
1210	DESC	£.F.	=	\$162	•	(0.023726	X	\$	_)*
1220	DESC	E.F.	=	\$162	+	(0.008390	x	\$	
1248	DESC	E.F.	=	\$162	+	(0.007238	X	\$	_,
1260	DESC	E.F.	=	\$162	+	(0.023726	X	\$)*
1265	DESC	E.F.	=	\$162	+	(0.023726	X	\$	>*
1270	DESC	E.F.	=	\$162	+	(0.004323	X	s	_)
1280	DESC	E.F.	=	\$162	+	(0.016426	X	\$)
1285	DESC	E.F.	=	\$162	+	(0.038730	X	\$	_,
1290	DESC	E.F.	=	\$162	+	(0.026160	X	\$	>
1420	DESC	E.F.	=	\$162	+	(0.016650	X	\$	_>
1430	DESC	E.F.	=	\$162	+	(0.043608		\$)
1440	DESC	E.F.	=	\$162	+	(0.002602	X		_,
1660	DESC	E.F.	=	\$162	+	(0.005316)
4931	DESC	E.F.	=	\$162	+	(0.052899			,
4935	DESC	E.F.	=	\$162	+	(0.006765			
5805	DESC	E.F.	3	\$178	+	(0.013827			
5815	DESC	E.F.	*	\$178	+	(0.026187			
5820	DESC	E.F.	=	\$178	+	(0.024292			_
5821	DESC	E.F.	=	\$178	+	(0.025702			
5825	DESC	E.F.	=	\$178	+	(0.031425			
5826	DESC	E.F.	=	\$178		(0.007246			
5830	DESC	E.F.	=	\$178	+	(0.025646			
5831	DESC	E.f.	=	\$178	+	(0.008207			
5835	DESC	E.F.	=	\$178	+	(0.015699			',
5836	DESC	E.F.	=	\$178	+	(0.047195			,
5840	DESC	E.F.	=	\$178	+	(0.041278 0.012361			,
5841	DESC	E.F.	=	\$178	+	(0.012361			—',
5845	DESC	E.F.	=	\$178	+	(0.023172			—',
5850 5855	DESC	E.F.	2	\$178 \$178	+	(0.001741			—'
5860	DESC Desc	E.F. E.F.	2	\$178	+	(0.003466			
5865	DESC	E.F.		\$178	+	(0.001704			;
5895	DESC	E.F.	2	\$178	+	(0.023366			;
5905	DESC	E.F.	-		·	ì	0.039495			
5910	DESC	E.F.	=		•	(0.018205			
5915	DESC	E.F.	-		•	(0.019095			′,
5920	DESC	E.F.	=		•	(0.028999			<u>`</u> ,
5925	DESC	E.F.	=		·	(0.016701			—´,
5930	DESC	E.F.	=		+	ì	0.012098			— <u>`</u> ,
5935	DESC	E.F.	=		· •	(0.023156			— <u>`</u>
5945	DESC	E.F.	=		•	ì	0.014348			
5950	DESC	E.F.	_		+	ì	0.011050			— <u>`</u>
				- · - ·		•		,		·

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract valua" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	=	ADMINISTRATIVE COST	•	(PROPORTION	×	PROPOSED CONTRACT VALUE)
5955	DESC	E.F.	=	\$157	+	(0.032604	X	\$	_)
5960	DESC	E.F.	=	\$169	+	(0.012519	X	\$	_>
5961	DESC	E.F.	=	\$158	+	(0.033475	X	\$	_>
5962	DESC	E.F.	=	\$169	+	(0.045253	X	\$	_)
5963	DESC	E.F.	*	\$164	+	(0.044689	X	\$	_)
5965	DESC	E.F.	=	\$178	+	(0.012610	X	\$	_>
5970	DESC	E.F.	=	\$164	+	(0.005763	×	\$	_)
5980	DESC	E.F.	=	\$164	+	(0.619747	X	\$	_)
5985	DESC	E.F.	=	\$178	+	(0.011340	X	\$)
5990	DESC	E.F.	=	\$178	+	(0.018994	X	\$	_)
5998	DESC	E.F.	=	\$164	+	(0.004296	X	\$	_)
5999	DESC	E.F.	=	\$178	+	(0.027064	X	\$)
6010	DESC	E.F.	=	\$162	+	(0.023726	X	\$)*
6015	DESC	E.F.	=	\$162	+	(0.023726	X	\$	>*
6020	DESC	E.F.	=	\$162	+	(0.010509	X	\$)
6030	DESC	E.F.	=	\$162	+	(0.000280	X	\$	>
6060	DESC	E.F.	=	\$162	+	(0.026840	X	\$	_)
6070	DESC	E.F.	=	\$162	+	(0.076949	X	\$	>
6080	DESC	E.F.	=	\$162	+	(0.023726	X	\$)*
6120	DESC	E.F.	=	\$162	+	(0.051489	X	\$	_>
6220	DESC	E.F.	=	\$162	+	(0.000193	X	\$)
6625	DESC	E.F.	=	\$169	+	(0.027588	X	\$)
7010	DESC	E.F.	=	\$162	+	(0.038707	X	\$)
7020	DESC	E.F.	=	\$162	+	(0.023726	X	\$	_)*
7021	DESC	E.F.	*	\$162	+	(0.001513	X	\$)
7025	DESC	E.F.	=	\$162	+	(0.032790	X	\$)
7030	DESC	E.F.	=	\$162	+	(0.023726	X	\$)*
7035	DESC	E.F.	=	\$162	+	(0.022430	X	\$	>
7040	DESC	E.F.	=	\$162	+	(0.009111	X	\$)
7045	DESC	E.F.	=	\$162	+	(0.030182	X	\$)
7050	DESC	E.F.	=	\$162	+	(0.001024	X	\$,

^{*} There were no historical records reflecting closed packaging RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION						PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION		,
		PCKGNG ROD		COST		`		VALUE)
								TALUE	
4040									
1040	DGSC	E.F.	*	\$207	+	(0.036682	x s)*
1045	DGSC	E.F.	=	\$207	+	(0.036582	X \$) *
1055	DGSC	E.F.	=	\$207	+	(0.013567	X \$	·)
1075	DGSC	E.F.	=	\$207	+	(0.036682	X \$	·)*
1080	DGSC	E.F.	=	\$207	+	(0.036682	X \$)*
1090	DGSC	E.F.	=	\$207	+	(0.036682	X \$)*
1560	DGSC	E.F.	=	\$207	+	(0.006879)
1680	DGSC	E.F.	=	\$207	+	(0.004888)
1820	DGSC	E.F.	=	\$207	+	(0.036682)*
1830	DGSC	E.F.	=	\$207	+	(0.036682) *
1840	DGSC	E.F.	=	\$207	+	(0.036682) *
1850	DESC	E.F.	=	\$207	+	(0.036682		· •
1860	DGSC	E.F.	=	\$207	+	(0.036682) *
2050	DGSC	E.F.	=	\$207	+	(0.036682		>*
2060	DGSC	E.F.	=	\$207	+	(0.036682		·)*
2090	DGSC	E.F.	=	\$207	+	(0.057363)
3210	DGSC	E.F.	=	\$207	+	(0.036682		`*
3220	DGSC	E.F.	=	\$207	+	(0.012046)
3230	DG\$C	E.F.	=	\$207	+	(0.050196)
3405	DGSC	E.F.	=	\$224	+	(0.008531)
3408	DGSC	E.F.	=	\$224	+	(0.036682		, ,*
3410	DGSC	E.F.	=	\$224	+	(0.036682		,)*
3411	DGSC	E.F.	=	\$224	+	Ċ	0.036682		,)*
3412	DGSC	E.F.	2	\$224	+	(0.036682	. :	,)*
3413	DGSC	E.F.	=	\$224	+	Ċ	0.005946)
3414	DGSC	E.F.	=	\$224	+	(0.036682 x))*
3415	DGSC	E.F.	=	\$224	+	Ċ	0.056467 x		-
3416	DGSC	E.F.	=	\$224	+	Ì	0.001099 x		, }
3417	DGSC	E.F.	*	\$224	+	(0.082326 x		
3418	DGSC	E.F.	=	\$224	+	Ċ	0.036682 x) *
3419	DGSC	E.F.	=	\$224	+	ì	0.151578 x	·	
3422	DGSC	E.F.		\$224	+	Ċ	0.036682 x	·	,)*
3424	DGSC	E.F.	=	\$224	+	Ċ	0.003362 x) -)
3426	DGSC	E.F.	=	\$224	+	Ò	0.004934 x		
3431	DGSC	E.F.	=	\$224	+	ì	0.034303 X		
3432	DGSC	E.F.	=	\$224	+	ì	0.036682 x		,) *
3433	DGSC	E.F.	=	\$224	+	ì	0.043336 x		
3436	DGSC	E.F.	=	\$224	+	ì	0.036682 X) *
3438	DGSC	E.F.	=	\$224	+	ì	0.110878 x		
3439	DGSC	E.F.	=	\$224	+	ì	0.050718 x		
3441	DGSC	E.F.	=	\$224	+	ì	0.054076 x		
3442	DGSC	E.F.		\$224	+	ì	0.029612 X		
		-				•	AIGE A	S)	,

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	3	ADMINISTRATIVE COST	•	(PROPORTION	x	PROPOSED CONTRACT VALUE)
3443	DGSC	E.F.	=	\$224	+	(0.000040	X	\$)
3444	DGSC	E.F.	=	\$224	+	(0.111066	X	\$	>
3445	DGSC	E.F.	=	\$224	+	(0.026482	X	\$	_,
3446	DGSC	E.F.	=	\$224	÷	(0.036682	X	\$	_)*
3447	DGSC	E.F.	=	\$224	+	(0.036682	X	\$	_)*
3448	DGSC	E.F.	=	\$224	+	(0.036682	X	\$	>*
3449	DGSC	E.F.	=	\$224	+	(0.036682	X	\$)*
3450	DGSC	E.F.	=	\$224	+	(0.036682	X	\$)*
3455	DGSC	E.F.	=	\$224	+	(0.034066	X	\$	_)
3456	DGSC	E.F.	=	\$224	+	(0.020499	X	\$)
3460	DGSC	E.F.	=	\$224	+	(0.063641	X	\$	>
3461	DGSC	E.F.	=	\$224	+	(0.036682	X	s	_)*
3465	DGSC	E.F.	=	\$224	+	(0.131137	X	\$)
3470	DGSC	E.F.	=	\$224	+	(0.036682		\$	_>*
3510	DGSC	E.F.	=	\$211	+	(0.017340		\$	_,
3520	DGSC	E.F.	=	\$211	+	(0.036682		\$)*
3530	DGSC	E.F.	=	\$211	+	(0.075922		\$	_,
3605	DGSC	E.F.	=	\$211	+	(0.036682		·	_>*
3610	DGSC	Ē.F.	=	\$211	+	(0.033133		\$	_,
3611	DGSC	E.F.	=	\$211	+	(0.007338		\$	}
3615	DGSC	E.F.	=	\$211		(0.043640		\$	_) _)*
3620	DGSC	E.F.	=	\$211	+	(0.036682		·	
3625	DGSC	E.F.	=	\$211	+	(0.036682 0.036682			— <u>),</u>
3630 7475	DGSC	E.F.	=	\$211	+	(0.036682			*(*(
3635 3640	DGSC	E.F.	2	\$211 \$211	+	(0.036682			—) <u>*</u>
3645	DGSC DGSC	E.F. E.F.	=	\$211	*	(0.036682			
3650	DGSC	E.F.	-	\$211	+	(0.036682			— <u>′</u> ,*
3655	DGSC	E.F.	=	\$211	•	(0.008726			;
3660	DGSC	E.F.	=	\$211	•	ì	0.036682			
3670	DGSC	E.F.	=	\$211	+	ì	0.036682			
3680	DGSC	E.F.	=	\$211	+	ì	0.020125			
3685	DGSC	E.F.	=	\$211	+	Ċ	0.036682			
3690	DGSC	E.F.	=	\$211	+	Ċ	0.036682			
3693	DGSC	E.F.	*	\$211	+	(0.036682			
3694	DGSC	E.F.	=		+	(0.113962			
3695	DGSC	E.F.	=		+	(0.067951	i x	\$)
3920	DGSC	E.F.	=		+	(0.040704)
3940	DGSC	E.F.	=		+	(0.039996	5 X	\$)
3990	DGSC	E.F.	=		+	(0.024089))		
4110	DGSC	E.F.	=		+	(0.067089	?)
4120	DGSC	E.F.	=	\$207	+	(0.010881	1 >)

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FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	=	ADMINISTRATIVE COST	•	(PROPORTION	x	PROPOSED CONTRACT VALUE	,
4130	DGSC	E.f.	=	\$207	+	(0.029605	x	\$	_)
4140	DGSC	E.F.	=	\$207	+	(0.019595	X	\$	_)
4230	DGSC	E.F.	=	\$198	+	(0.090584	X	\$	_)
4240	DGSC	E.F.	=	\$198	+	(0.012089	X	\$	>
4920	DGSC	E.F.	=	\$227	+	(0.012822	X	\$	>
4921	DGSC	E.F.	=	\$227	+	(0.036682	X	\$)*
4923	DGSC	E.F.	=	\$227	+	(0.036682		\$	_)*
4925	DGSC	E.F.	=	\$227	+	(0.036682			>*
4927	DGSC	E.F.	=	\$227	+	(0.036682			_)*
4933	DGSC	E.F.	=	\$227	+	(0.036682			_)*
4960	DGSC	E.f.	Ξ	\$227	+	(0.036682			_)*
5220	DGSC	E.F.	=	\$211	+	(0.062948		-	
5280	DGSC	E.F.	=	\$211	+	(0.036682		·	-) *
5355	DGSC	E.f.	=	\$211	+	(0.034895 0.058034			
5940 5970	DGSC DGSC	E.f.	=	\$202 \$202	•	(0.036451		`	
5975	DGSC	E.f. E.f.	=	\$202 \$204	+	(0.038427			
5977	DGSC	E.f.	-	\$204	·	(0.036427			
5995	DGSC	E.F.	-	\$202	•	(0.016069		·	
6105	DGSC	E.f.	=	\$227		Č	0.015773			
6110	DGSC	E.F.	=	\$204	+	ì	0.023271			_
6115	DGSC	E.F.	=	\$227	+	ì	0.040113			_
6116	DGSC	E.F.	=	\$219	+	ì	0.036682			
6120	DGSC	E.F.	=	\$219	+	ì	0.025643			
6125	DGSC	E.F.	=	\$219	+	ì	0.006880			
6130	DGSC	E.F.	=	\$227	+	(0.040938	×		
6135	DGSC	E.F.	=	\$219	+	(0.030474	×		>
6140	DGSC	E.F.	=	\$227	+	(0.056377	, X		>
6150	DGSC	E.F.	=	\$204	+	(0.032543	×		,
6210	DGSC	E.F.	=	\$202	+	(0.043064	×	\$	>
6220	DGSC	E.F.	=	\$202	+	(0.026422	: X		>
6230	DGSC	E.F.	=	\$202	+	(0.016375	×	\$)
6240	DGSC	E.F.	=	\$202	+	(0.055685	X	\$	>
6250	DGSC	E.F.	=	\$202	+	(0.047784	×	\$	_,
6260	DGSC	E.F.	=	\$202	+	(0.028787	X	\$	_)
6310	DGSC	E.F.	=	\$211	+	(0.036682)*
6320	DGSC	E.F.	=	\$211	+	(0.080925			_,
6330	DGSC	E.F.	=	\$211	+	(0.036682			_)*
6340	DGSC	E.F.	=	\$211	+	(0.003451)
6350	DGSC	E.F.	=	\$211	+	(0.034485			—)
6605	DGSC	E.F.	=	\$208	+	(0.041316			}
6610	DGSC	E.f.	=	\$208	+	(0.036723	X	\$)

^{*} There were no historical records reflecting closed packaging RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	I	ADMINISTRATIVE COST	•	(PROPOSED PROPORTION X CONTRACT > VALUE
6615	DGSC	E.F.	=	\$208	+	(0.001503 x \$)
6620	DGSC	E.F.	=	\$208	+	(0.002813 x s)
6635	DGSC	E.F.	=	\$208	+	(0.041255 x \$)
6636	DGSC	E.F.	=	\$208	+	(0.036682 x \$)*
6645	DGSC	E.F.	=	\$208	+	(0.019217 X \$)
6650	DGSC	E.F.	=	\$208	+	(0.034480 x \$)
6655	DGSC	E.F.	=	\$208	+	(0.006361 X \$)
6660	DGSC	E.F.	=	\$208	+	(0.041431 X \$)
6665	DGSC	E.F.	=	\$208	+	(0.021403 X \$)
6670	DGSC	E.F.	=	\$208	+	(0.003299 X \$)
6675	DGSC	E.F.	=	\$208	+	(0.042031 X \$)
6680	DGSC	E.F.	Æ	\$208	+	(0.031130 X \$)
6685	DGSC	E.F.	=	\$208	+	(0.031931 X \$)
6695	DGSC	E.F.	=	\$208	+	(0.031194 X \$)
6710	DGSC	E.F.	=	\$208	+	(0.016901 X \$)
6720	DGSC	E.F.	=	\$208	+	(0.037352 X \$)
6730	DGSC	E.F.	=	\$208	+	(0.012748 x \$)
6740	DGSC	E.F.	2	\$208	+	(0.020411 X \$)
6750	DGSC	E.F.	=	\$208	+	(0.041852 X \$)
6760	DGSC	E.F.	=	\$208	+	(0.009670 x \$)
6770	DGSC	E.F.	=	\$208	+	(0.001890 X \$)
6780	DGSC	E.F.	=	\$208	+	(0.023738 X \$)
6810	DGSC	E.F.	=	\$227	+	(0.049530 X \$)
6820	DGSC	E.F.	=	\$227	+	(0.129016 X \$)
6830	DGSC	E.F.	=	\$227	+	(0.078593 X \$)
6840	DGSC	E.F.	=	\$227	+	(0.112071 X \$)
6850	DGSC	E.F.	3	\$227	+	(0.031755 X \$)
6910	DGSC	E.F.	=	\$211	+	(0.036682 X \$)*
6920	DGSC	E.F.	=	\$211	•	(0.008905 X \$)
6930	DGSC	E.F.	=	\$211	•	(0.085869 X \$)
6940	DGSC	E.F.	=	\$211	•	(0.000378 X \$)
7105	DGSC	E.F.	=	\$211	+	(0.001303 X \$)
7125	DGSC	E.F.	•	\$211	•	(0.010054 x 5
7310	DGSC	E.F.		\$227	+	(0.044831 X \$)
7320	DGSC	E.f.			+	(0.037006 X \$)
7330	DGSC	E.F.	=		+	(0.009420 X \$) 0.013314 X \$)
7360	DGSC	E.F.	=			(0.013314 X \$) 0.036682 X \$)*
7450	DGSC	E.F.	=	· - · ·	+	(
7610	DGSC	E.F.	=	72.5		(
7630	DGSC	E.F.	=		+	(0.036682 X \$)* 0.036682 X \$)*
7640	DGSC	E.F.	-	· - · -			
7650	DGSC	E.F.	=	\$213	+	(0.036682 X \$)*

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		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	3	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		PCKGNG ROD		COST					VALUE	
7660	DGSC	E.F.		\$213	+	(0.036682	¥	\$) *
7670	DGSC	E.F.	=	\$213	+	Ċ	0.036455	X	\$	_,
7690	DGSC	E.F.		\$213	+	ì	0.047266		\$	
8110	DGSC	E.F.	=	\$211	+	ì	0.003389		\$	
8120	DGSC	E.F.	=	\$211	+	ì	0.006077		\$	
8125	DGSC	E.F.	=	\$211	+	ì	0.011916		\$	<i>'</i>
8130	DGSC	E.F.	=	\$211	+	ì	0.036682		\$	
8140	DGSC	E.F.	=	\$211	+	ì	0.008873		\$	
8145	DGSC	E.F.	_	\$211		ì	0.000439		\$	<u>'</u>
9110	DGSC	E.F.	=	\$211	+	ì	0.036682		\$	
9150	DGSC	E.F.	_	\$211	+	ì	0.017826		\$	
9160	DGSC	E.F.	=	\$211	+	ì	0.023979		\$	′,
9320	DGSC	E.F.	=	\$227	+	ì	0.040159		\$	-(
9330	DGSC	E.F.	=	\$227		ì	0.032622		\$	-(
9340	DGSC	E.F.	=	\$227	•	ì	0.024998			-(
9350	DGSC	E.F.	=	\$227	•	ì	0.000622		\$	-(
9390	DGSC	E.F.	=	\$227	•	ì	0.039986			- <u>'</u>
9440	DGSC	E.F.	-	\$211	•	Č	0.036682		\$	', ',*
				· - ·	•	•	0.036682		\$)*
9450	DGSC	E.F.	=	\$211		(\$	- '
9620	DGSC	E.F.	=	\$211	+	(0.036682		\$	_)*
9925	DGSC	E.F.	=	\$211	+	(0.031901			;
9930	DGSC	E.F.	=	\$211	+	(0.003163		\$	_,
9999	DGSC	E.F.	=	\$211	+	(0.036682	X	\$	_)*

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FSC	CENTER	EVALUATION FACTOR PER PCKGNG ROD	=	ADMINISTRATIVE COST	+	(PROPORTION)	PROPOSED CONTRACT VALUE)
1560	DISC	E.F.	=	\$153	•	(0.042211	(\$	_>
1670	DISC	E.F.	=	\$153	+	(0.250000	(\$	_)
1680	DISC	E.F.	=	\$153	+	(0.074731	、\$ _	_)
2020	DISC	E.F.	=	\$145	+	(0.113587	\$	_)*
2030	DISC	E.F.	=	\$145	+	(0.033171	< \$	_)
2040	DISC	E.F.	=	\$145	+	(0.003554		_)
2810	DISC	E.F.	=	\$153	+	(0.113587		_>*
2835	DISC	E.F.	=	\$153	+	(0.131362		_)
2840	DISC	E.F.	=	\$153	+	(0.142648		_,
2845	DISC	E.f.	=	\$153	+	(0.113587)*
2915	DISC	E.f.	=	\$145	+	(0.113587		_) <u>*</u>
2925	DISC	E.F.	=	\$145	+	(0.113587)*)
2935	DISC	E.F.	=	\$145	+	(0.113587)*
2945	DISC	E.F.	=	\$145	+	(0.113587		_)*
2950	DISC	E.F.	=	\$145	+	(0.113587		_)*
2995	DISC	E.F.	=	\$145	+	(0.113587		_)*
3110	DISC	E.F.	=	\$145	+	(-,
3120	DISC	E.F.	=	\$145	+	(0.144067		
3130	DISC	E.F.	=	\$145	+	(0.008263 0.250000		
3940 4010	DISC	E.F. E.F.	=	\$145 \$143	+	(0.182880		_)
4010	DISC	E.F.	=	\$143 \$143	+	(0.112529		_,
4030	DISC	E.F.	=	\$143	+	(0.144970		
5305	DISC	E.F.	_	\$143	·	(0.104777		— <i>'</i>
5306	DISC	E.F.	=	\$143	+	ì	0.104968		,
5307	DISC	E.F.	=	\$143	+	ì	0.201364		
5310	DISC	E.F.	=	\$143	+	ì	0.130377		
5315	DISC	E.F.	=	\$143	+	Ċ	0.157778		·
5320	DISC	E.F.	=	\$143	+	Ċ	0.110410		
5325	DISC	E.F.	=	\$143	+	(0.128868	x \$	
5330	DISC	E.F.	=	\$143	+	(0.113713	x \$	
5335	DISC	E.F.	=	\$143	+	(0.143653	x \$	_,
5340	DISC	E.F.	=	\$143	+	(0.129984	x \$)
5355	DISC	E.F.	2	\$143	+	(0.077121	x \$)
5360	DISC	E.F.	=	\$143	+	(0.160603	x \$	>
5365	DISC	E.F.	=	\$143	+	(0.101468	x \$	>
6145	DISC	E.F.	=	\$140	+	(0.139542	x \$,
9505	DISC	E.F.	=	\$153	+	(0.167586	x \$,
9510	DISC	E.F.	=	\$153	+	(0.086169	x \$	>
9515	DISC	E.F.	=	\$153	+	(0.062927	x \$)
9520	DISC	E.F.	=	\$153	+	(0.072304	x \$)
9525	DISC	E.F.	=	\$153	+	(0.113587	x \$)*

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		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		PCKGNG ROD		COST					VALUE	
9530	DISC	E.F.	=	\$153	•	(0.107776	X	s	_)
9535	DISC	E.F.	=	\$153	+	(0.120765	X	\$	_)
9540	DISC	E.F.	=	\$153	+	(0.113587	X	\$	_)*
9545	DISC	E.F.	=	\$153	+	(0.113587	X	\$	*
9610	DISC	E.F.	=	\$145	+	(0.113587	X	\$)*
9630	DISC	E.F.	=	\$145	+	(0.113587	X	\$	_)*
9640	DISC	E.F.	=	\$145	+	(0.113587	X	\$)*
9650	DISC	E.F.	z	\$145	+	(0.113587	X	\$	_ _)*
9660	DISC	E.F.	=	\$145	+	(0.113587	X	\$)*
9670	DISC	E.F.	=	\$145	+	(0.113587	X	\$)*
9680	DISC	E.F.	=	\$145	+	(0.113587	X	\$	_)*

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		PCKGNG ROD		COST					VALUE	•
6505	DPSC·M	E.F.	_							
_			=	\$254	+	(0.093403	X	\$	_)
6508	DPSC-M	E.f.	=	\$234	+	(0.082260	X	\$	_)*
6510	DPSC-M	E.F.	=	\$254	+	(0.037554	X	\$)
6515	DPSC-M	E.F.	=	\$254	+	(0.061500	X	\$	_,
6520	DPSC-M	E.F.	=	\$220	+	(0.082260	x	\$	
6525	DPSC-M	E.F.	=	\$220	+	(0.082260		\$	
6530	DPSC-M	E.F.	=	\$229	+	(0.050454		\$	- <u>′</u>
6532	DPSC-M	E.F.	=	\$202	+	(0.082260		\$	_/ _)*
6540	DPSC-M	E.F.	=	\$220	+	(0.082260		\$	
6545	DPSC-M	E.F.	=	\$234	+	Ċ	0.082260		\$	-/)*
6550	DPSC-M	E.F.	=	\$254	+	(0.004132	X	\$	
6630	DPSC-M	E.F.	=	\$220	+	(0.000355		\$	-1
6640	DPSC-M	E.F.	=	\$254	+	Ċ	0.250000		\$	-,
8820	DPSC-M	E.F.	=	\$238	+	ί.	0.082260		<u>-</u>	-/ -/*
9410	DPSC-M	E.F.	=	\$238	+	ì	0.082260	• • •	<u></u>	_/~ _)*
						•	46200		~	_,"

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION					PROPOSED
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION X CONTRACT)
		PCKGNG ROD		COST			VALUE
7210	DPSC - T	E.F.	=	\$433	+	(0.011339 X \$)
8305	DPSC-T	E.F.	=	\$433	+	ì	0.011212 X \$)
8310	DPSC-T	E.F.		\$433	+	ì	0.018375 X \$)*
8315	DPSC-T	E.F.	=	\$433	+	ì	0.018375 x \$)*
8320	DPSC-T	E.F.	=	\$433	•	ì	0.018375 X \$)*
8325	DPSC-T	E.F.	=	\$433		ì	0.018375 X \$)*
8330	DPSC-T	E.F.	=	\$433	+	ì	0.018375 X \$)*
8335	DPSC-T	E.F.	=	\$433		ì	0.018375 X \$)*
8340	DPSC-T	E.F.	=	\$433	+	ì	0.003088 X \$
8345	DPSC-T	E.F.	=	\$433	•	ì	0.018375 X \$)*
8405	DPSC-T	E.F.	=	\$435	•	Č	0.013962 X \$
8410	DPSC-T	E.F.	=	\$435	·	ì	0.036637 X \$
8415	DPSC-T	E.F.	=	\$358	· +	(0.016267 X \$
8420	DPSC-T	E.F.	_	\$435	+	(0.000762 X \$)
8425	DPSC-T	E.F.	=	\$427	·	(
8430	DPSC-T	E.F.	_	\$474	+	(
8435	DPSC-T	E.F.	_	\$474	+		
8440	DPSC-T	E.F.	=	\$435		(
8445	DPSC-T			\$433 \$427		(
		E.F.	=		+	(0.000753 X \$)
8450	DPSC-T	E.F.	=	\$427	+	(0.018375 X \$)*
8455	DPSC-T	E.F.	=	\$435	+	(0.001538 X \$)
8460	DPSC-T	E.F.	=	\$427	+	(0.001236 X \$)
8465	DPSC-T	E.f.	=	\$358	+	(0.005836 X \$)
8470	DPSC-T	E.F.	=	\$427	+	(0.001684 X \$)
8475	DPSC-T	E.F.	=	\$427	+	(0.018375 X \$)*
9420	DPSC-T	E.F.	=	\$433	+	(0.018375 X \$)*
9430	DPSC-T	E.F.	=	\$433	+	(0.018375 X \$)*

^{*} There were no historical records reflecting closed packaging RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

APPENDIX B

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Shipping RODs Evaluation Factors

(By Center and FSC Within Center)

		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG ROD		COST					VALUE	
1005	0000		_	\$191		,	0.011067	J	•	
1005	DCSC	E.F	=	\$191 \$191	+		0.011967 0.030064	X	·	_) _)*
1010	DCSC	E.F	=	\$191	+	(0.030084		\$	<i>'</i>
1015	DCSC	E.F	=	\$191	+	(0.031242	X	\$ \$	
1020 1025	DCSC	E.F	=	\$191	+	(0.004439	X	\$	_
1025	DCSC	E.F	=	\$191	+	Ċ	0.070729	X	\$	
1095		E.f		\$191	+	(0.010012	X	s	
1450	DCSC	E.F E.F	=	\$191	+	(0.020286	X	\$	
1610	DCSC	E.F	-	\$210	+	(0.087265	X		
1615		E.F	-	\$210		Ċ	0.037205	X	\$ \$	
1620	DCSC	E.F	-	\$210	+	(0.038303	X	\$	
1630	DCSC		-	\$210	+	(0.012332	×		
1650	DCSC	E.F	=	\$210	+	(0.010133	×		-,
1730	DCSC	E.F E.F	=	\$210	+	(0.022777	X		
1740	DCSC	E.F	-	\$210	+	(0.070032	×		
2010	DCSC	E.F	-	\$191	+		0.070032	X		_ <u>'</u>
2010			-	\$191 \$191	+	•	0.030064	X		- <u>'</u> ,
2230	DCSC	E.F E.F	=	\$191 \$191	+	•	0.030004	X		—) <u> </u>
2250	DCSC		=	\$191	+	-	0.030064	X		_, _,*
2410	DCSC	E.F		\$191 \$191	+	•	0.030064	X)*
2410	DCSC	E.F	=	\$191 \$191	+	•	0.030064	X)*
2 5 10	DCSC	E.F	=	\$184	+	•	0.030004	X		
2510	DCSC	E.F E.F	=	\$184	+	•	0.032741	X		',
2530	DCSC	E.F	=	\$184	+	•	0.032741	×		_,
2540		E.F	-	\$134	+	•	0.040814	×		一;
2590	DCSC	E.F	-	\$184 \$184		٠,	0.023755	X		;
2620	DCSC	E.F	-	\$191	+	•	0.023733	X		, ,
2805	DCSC	E.F	=	\$198	+	-	0.030084	X		
2815		E.F	-	\$198	+	•	0.029625	, X		;
2820	DCSC	E.F	-	\$198	+	•	0.024823	X		
				\$198	+	-	0.030064	X		<u>_</u>
2825	DCSC	E.F	=			-	0.030064	^)		—)*
2830	DCSC	E.f	=	\$198	+	-				
2850	DCSC	E.F	-	\$198		• (0.030064	X)*
2895	DCSC	E.F	=	\$198		• (0.030064	X		*
2910	DCSC	E. F	=	•	•	(0.025826)		—',
2920	DCSC	E.F	3	\$198	+	•	0.027388)		—'
2930	DCSC	E.F	*	\$198	+	•	0.028823	X		—'
2940	DCSC	E.F	=	\$198	+	•	0.046078	X		-,
2990	DCSC	E.F	=	\$198	+	•	0.038540	X		-,
3010	DCSC	E.F	=	\$196	+	(0.032343	X		'
3020	DCSC	E.F	=	\$196	+	• (0.031960)		-'
3030	DCSC	E.F	=	\$196	+	(0.047577)	\$)

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract valua" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUAT	TION						PROPOSED	
FSC	CENTER	FACTOR	PER =	ADMINISTRATIVE	•	(PROPORTION	X)
		SHPPNG		COST					VALUE	•
70/0	0000									
3040 7710	DCSC	E.F	=	\$196	+	(0.021885	X	\$	_>
3710 3730	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*
3720 7770	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*
3730 3740	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_>*
	DCSC	E.F	2	\$191	+	(0.012941	X	s	_>
3760 3770	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*
3805	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_>*
3810	DCSC	E.F	*	\$191	+	(0.001877	X	\$	_)
3815	DCSC	E.F	=	\$191	+	(0.010001	X	\$	_)
3820	DCSC	E.F	=	\$191	+	(0.009579	X	\$	_)
3825	DCSC	E.F	=	\$191	+	(0.015606	X	\$	_)
	DCSC	E.F	2	\$191	+	(0.027984	X	\$	_>
3830 3835	DCSC	E.F	=	\$191		(0.059723	X	\$	_)
3895	DCSC	E.F	=	\$191	+	(0.013225	X	\$	_)
3910	DCSC	E. F	=	\$191	+	(0.003041	X	\$	_>
3910 3915	DCSC	E.F	2	\$191	+	(0.090371	X	\$	_)
3930	DCSC	E.f	=	\$191		(0.030064	X	\$	_)*
3950	DCSC	E.F	=	\$191		(0.011224	X	\$	_)
3960	DCSC	E.F	=	\$191	+	(0.032646	X	\$	_)
	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*
4210	DCSC	E.F	=	\$198	+	(0.017412	X	\$	_)
4220	DCSC	E.F	2	\$198	+	(0.026354	X	\$	_>
4310	DCSC	E.F	=	\$198	+	(0.031139	X	\$	_>
4320	DCSC	E.F	=	\$198	+	(0.023280	X	\$	_)
4330	DCSC	E.F	=	\$198	+	(0.027927	X	\$	_)
4410	DCSC	E.F	=	\$191	+	(0.040020	X	\$	_)
4420	DCSC	E.F	=	\$191	+	(0.053842	X	\$	_)
4430	DCSC	E.F	=	\$191	+	(0.227423	X	\$	_)
4440	DCSC	E.F	=	\$191	+	(0.028592	X	\$	_)
4460	DC\$C	E.F	=	\$191	+	(0.023339	X	\$	_)
4510	DCSC	E.F	=	\$185	+	(0.027127	X	\$)
4520	DCSC	E.F	=	\$185	+	(0.021292	X	\$)
4530	DCSC	E.F	=	\$185	+	(0.006607	X	\$)
4540	DCSC	E.F	*	\$185	+	(0.040310	X	\$)
4610	DCSC	E.F	=	\$191	+	(0.024087	X	\$)
4620	DCSC	E.F	=	\$191	+	(0.021681	X	\$)
4630	DCSC	E.F	=	\$191	+	(0.002850	X	\$)
4710	DCSC	E.F	=	\$185	•	(0.029233	X	\$)
4720	DCSC	E.F	=	\$185	+	(0.035228	X	\$)
4730	DCSC	E.F	=	\$185		(0.025852	X	\$)
4810	DCSC	E.F	2	\$188	+	(0.029785	X	\$)
4820	DCSC	E.F	=	\$188	+	(0.033979	X	\$)

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract valua" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION							PROPOSED	
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG ROD		COST					VALUE	
4910	DCSC	E.F	=	\$188	+	(0.011006	X	s)
4930	DCSC	E.F	=	\$188	+	Ċ	0.021300	X	\$	-)
4940	DCSC	E.F	=	\$188	+	Ċ	0.019971	X	\$)
5410	DCSC	E.F	=	\$191	+	(0.019263	X	\$)
5411	DCSC	E.F	3	\$191	+	(0.030064	X	\$	_)*
5420	DCSC	E.F	=	\$191	+	(0.029062	X	\$	_)
5430	DCSC	E.F	=	\$191	+	(0.041356	X	\$	_)
5440	DCSC	E.F	=	\$191	+	(0.029468	X	\$	_)
5445	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*
5450	DCSC	E.F	=	\$191	+	(0.006661	X	\$	_)
5510	DCSC	E.F	=	\$189	+	(0.033672	X	\$	_)
5520	DCSC	E.F	=	\$189	+	(0.030064	X	\$	_>*
5530	DCSC	E.F	=	\$189	+	(0.035737	X	s	_)
5660	DCSC	E.F	2	\$191	+	(0.006879	X	\$	_)
5680	DCSC	E.F	=	\$191	+	(0.030064	X	\$	_)*

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

FSC	CENTER	EVALUATION FACTOR PER SHPPNG ROD	=	ADMINISTRATIVE COST	+	(PROPORTION	X	PROPOSED CONTRACT) VALUE	
1210	DESC	E.F	=	\$187	+	(0.043886	X	\$)*	,
1220	DESC	E.F	=	\$187	+	(0.097569	X	\$)	
1240	DESC	E.F	=	\$187	+	(0.079312	X	\$)	
1260	DESC	E.F	=	\$187	+	(0.028696	X	\$)	
1265	DESC	E.F	=	\$187	+	(0.043886	X	\$)*	•
1270	DESC	E.F	=	\$187	+	(0.086493	X	\$)	
1280	DESC	E.F	=	\$187	+	(0.043886	X	\$)*	1
1285	DESC	E.F	=	\$187		(0.075361	X	\$}	
1290	DESC	E.F	=	\$187		(0.011796	X	\$)	
1420	DESC	E.f	=	\$187	+	(0.121158	X	\$}	
1430	DESC	E.F	=	\$187	+	(0.068573 0.011162	X	\$	
1440 1660	DESC Desc	E.F E.F	=	\$187 \$187	+	(0.017182	X	\$) \$)	
4931	DESC	E.F	_	\$187	+	(0.019443	X	\$	
4935	DESC	E.F	=	\$187	+	ì	0.032990	X		
5805	DESC	E.F	=	\$199	+	ì	0.033518	X		
5815	DESC	E.F	=	\$199	+	Ċ	0.023136	X		
5820	DESC	E.F	=	\$199	+	(0.068941	X		
5821	DESC	E.F	=	\$199	+	(0.041319	X	\$>	
5825	DESC	E.F	=	\$199	+	(0.016072	X	\$>	
5826	DESC	E.F	#	\$199	+	(0.052936	X	\$)	
5830	DESC	E.F	=	\$199	+	(0.025137	X	\$)	
5831	DESC	E.F	=	\$199	+	(0.022606	X		
5835	DESC	E.F	=	•	+	(0.014651	×		
5836	DESC	E.F	=	•		(0.068453	×		
5840	DESC	E.F	=	•		(0.114350	X		
5841	DESC	E.F	=	****		(0.012179	X		
5845	DESC	E.F	3	• • • •		•	0.025303	X		_
5850	DESC	E.F	=	•		• (0.043886	X		
5855 5860	DESC DESC	E.F	=		+	•	0.047887 0.043886))		
5865	DESC	E.F E.F	_		+	-	0.043886)		
5895	DESC	E.F	_			. ()		
5905	DESC	E.F	=			. (0.066422)		
5910	DESC	E.F	=		•	-	0.056010)		
5915	DESC	E.F		****	•		0.040146)	_	
5920	DESC	E.F	=	****	+		0.032971)		
5925	DESC	E.F	=		•	(0.027816)	. ———	
5930	DESC	E.F	=	\$184	•	• (0.034373)	\$	
5935	DESC	E.F	*	\$184	+	• (0.040451)	(\$)	
5945	DESC	E.F	=	\$184	+	• (0.040127)	s)	
5950	DESC	E.F	=	\$184	+	• (0.049403)	(\$)	

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUAT							PROPOSED	
FSC	CENTER	FACTOR I	PER = AI	DMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG F	COD	COST					VALUE	Ť
5955	DESC	E.F	2	\$184	+	(0.066695	v	_	
5960	DESC	E.F	=	\$192		(0.037142	X	\$	_}
5961	DESC	E.F	=	\$185	+	•	0.050742	X	\$	-)
5962	DESC	E.F	=	\$192		(0.050743	X	\$	-)
5963	DESC	E.F	z	\$189		`	0.031408	X	\$	_)
5965	DESC	E.F	=	\$199		(0.043748	X	\$	-)
5980	DESC	E.F	=	\$189		(0.046034	X	\$	_)
5985	DESC	E.F	=	\$199		(0.039264	X	<u>\$</u>	_)
5990	DESC	E.F	=	\$199		(X	\$	_)
5999	DESC	E.F	=	\$199		(0.045199	X	\$	_)
6010	DESC	E.F	=	\$187	+ (•	0.043233	X	\$	_)
6015	DESC	E.F	=	\$187	+ (0.043886 0.043886	X	\$	_)*
6020	DESC	E.F	=	\$187	+ (•		X	\$	_)*
6030	DESC	E.F	=	\$187	+ (•	0.203563	X	\$	_)
6060	DESC	E.F	=	\$187	+ (-	0.043886	X	<u>\$</u>	.)*
6070	DESC	E.F	=	\$187	+ (•		X	\$.)
6080	DESC	E.F	=	\$187	+ (•		X	<u>*</u>	_)*
6625	DESC	E.F	=	\$192	+ (-		X	\$.)*
7010	DESC	E.F	=	\$187	+ (X	<u>*</u>	.)
7020	DESC	E.F	=	\$187	+ (X	<u>*</u>	.)
7021	DESC	E.F	=	\$187	+ (X	<u>*</u>	.)*
7025	DESC	E.F	=	\$187	+ (X X	\$)*
7030	DESC	E.F	2	\$187	+ (-		<u>*</u>	.)
7035	DESC	E.F	=	\$187	+ (X	<u>\$</u>	.)*
7040	DESC	E.F	=	\$187	+ (X	\$.)
7045	DESC	E.F	=	\$187	+ (X	<u>\$</u>	.)*
7050	DESC	E.F	=	\$187				X	<u>*</u>	.)
			_	#107	+ (0.140485	X	\$)

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION	l						PROPOSED
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG ROD	1	COST					VALUE
1040	DGSC	E.F	=	\$180	+	(0.025119	x	\$)*
1055	DGSC	E.F	=	\$180	+	ì	0.007533	×	s
1075	DGSC	E.F	=	\$180		ì	0.025119	X	\$)*
1080	DGSC	E.F	=	\$180	+	Ċ	0.025119	X	\$)*
1090	DGSC	E.F	=	\$180	+	(0.002572	X	\$
1560	DGSC	E.F	=	\$180	+	(0.008633	X	\$
1820	DGSC	E.F	=	\$180	+	(0.025119	X	\$
1830	DGSC	E.F	=	\$180	+	(0.025119	X	\$>*
1840	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
1850	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
1860	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
2050	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
2060	DGSC	E.f	=	\$180	+	(0.025119	X	\$)*
2090	DGSC	E.F	=	\$180	+	(0.066067	X	\$)
3210	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
3220	DGSC	E.F	=	\$180	+	(0.030806	X	\$)
3230	DGSC	E.F	=	\$180	+	(0.024107	X	\$)
3405	DGSC	E.F	=	\$188	+	(0.025119	X	\$)*
3408	DGSC	E.F	=	\$188	+	(0.025119	X	\$)*
3410	DGSC	E.F	=	\$188	+	•	0.025119	X	\$)*
3411	DGSC	E.F	=	\$188	+	(0.025119	X	\$)*
3412	DGSC	E.F	=	\$188	+	•	0.025119	X	\$>*
3413	DGSC	E.F	=	\$188	+	• (0.003671	X	\$>
3414	DGSC	E.F	=	\$188	+	• (0.025119	X	\$)*
3415	DGSC	E.F	3	\$188	+	• (0.038835	X	s)
3416	DGSC	E.F	3	\$188	+	. (0.025119)	: \$)*
3417	DGSC	E.F	=	\$188	+	• (0.068510	X	\$
3418	DGSC	E.F	=	\$188	+	• (0.025119	X	\$)*
3419	DGSC	E.F	=	\$188	+	• (0.075169	X	\$)
3422	DGSC	E.F	=	\$188	+	• (0.025119	X	\$)*
3424	DGSC	E.F		\$188	•	• (0.025119	X	* \$)*
3426	DGSC	E.F		\$188	•	• (0.003762	×	s)
3431	DGSC	E.F		\$188	•	• (0.026258	X	\$
3432	DGSC	E.F	=	\$188	+	• (0.025119	>	\$)*
3433	DGSC	E.F	=	\$188	+	• (0.009597)	\$)
3436	DGSC	E.F		\$188	+	• (0.025119	X	\$\$
3438	DGSC	E.F	3	\$188	+	• (0.031176)	\$
3439	DGSC	E.F	4	\$188	•	• (0.024549	×	\$
3441	DGSC	E.F		\$188	4	• (0.003971)	(\$)
3442	DGSC	E.F	•	\$188	4	• (0.025119)	* **
3443	DGSC	E.F	•	\$188	•	• (0.025119)	* ()*
3444	DGSC	E.f	1	\$188	4	• (0.075424)	(\$)

^{*} There were no historical records reflecting closed shipping RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATI	ON						PROPOSED	
FSC	CENTER	FACTOR P	ER =	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG R	OD TO	COST					VALUE	
3445	DGSC	E.F	=	\$188	+	(0.006578	X	\$	_)
3446	DGSC	E.F	=	\$188	+	(0.025119	X	\$	_)*
3447	DGSC	E.F	=	\$188	+	(0.025119	X	\$	_)*
3448	DGSC	E.F	=	\$188	+	(0.025119	X	\$	_)*
3449	DGSC	E.F	=	\$188	+	(0.025119	X	\$	_)*
3450	DGSC	E.F	=	\$188	+	(0.025119	X	\$	_>*
3455	DGSC	E.F	=	\$188	+	(0.014260	X	\$	_)
3456	DGSC	E.F	=	\$188	+	(0.034368	X	\$	_)
3460	DGSC	E.F	=	\$188	+	(0.032692	X	\$	>
3461	DGSC	E.F	=	\$188	+	(0.025119	X	\$)*
3465	DGSC	E.F	=	\$188	+	(0.016839	X	\$	_)
3470	DGSC	E.F	=	\$188	+	(0.025119	X	\$)*
3510	DGSC	E.F	=	\$181	+	(0.045203	X	\$	_)
3520	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3530	DGSC	E.F	=	\$181	+	(0.023867	X	\$)
3605	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3610	DGSC	E.F	=	\$181	+	(0.022364	X	\$)
3611	DGSC	E.F	=	\$181	+	(0.001994	X	\$	_)
3615	DGSC	E.F	=	\$181	+	(0.010103	X	\$)
3620	DGSC	E.F	=	\$181	+	(0.025119	X	\$	_)*
3625	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3630	DGSC	E.F	=	\$181	+	(0.025119	X	\$	>*
3635	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3640	DGSC	E.F	=	\$181	+	(0.025119	X	\$	_)*
3645	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3650	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3655	DGSC	E.F	=	\$181	+	(0.016700	X	\$)
3660	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3670	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3680	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3685	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3690	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3693	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
3694	DGSC	€.F		\$181	+	(0.220569	X	\$	
3695	DGSC	E.F			+	(0.122557	X	\$)
3920	DGSC	E.F	=		+	(0.042757	×		
3940	DGSC	E.F	=			(0.023243	×		
3990	DGSC	E.F	=			(0.003721	×		
4110	DGSC	E.F	•			. (0.029293)		,
4120	DGSC	E.F			+	_	0.025119)		
4130	DGSC	E.F	=		•		0.029647)		
							0.020003			

^{*} There were no historical records reflecting closed shipping RODs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUAT	ION						PROPOSED	
FSC	CENTER	FACTOR	PER =	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG 1	ROD	COST					VALUE	
4230	DGSC	E.F	*	\$175	+	(0.087652	X	\$	_
4240	DGSC	E.F	=	\$175	+	(0.010661	X	\$	
4920	DGSC	E.F	3	\$190	+	(0.041405	X	\$	_)
4921	DGSC	E.F	=	\$190	+	(0.025119	X	\$	_)*
4923	DGSC	E.F	=	\$190	+	(0.025119	X	\$	_>*
4925	DGSC	E.F	2	\$190	+	(0.025119	X	\$	_)*
4927	DGSC	E.F	=	\$190	+	(0.025119	X	\$	_)*
4933	DGSC	E.F	=	\$190	+	(0.025119	X	\$	_>*
4960	DGSC	E.F	=	\$190	+	(0.025119	X	\$	_)*
5220	DGSC	E.F	3	\$181	+	(0.065676	X	\$	_)
5280	DGSC	E.F	=	\$181	+	(0.025119	X	<u> </u>	_)*
5355	DGSC	E.F	=	\$181	+	(0.026796	X	\$	_,
5940	DGSC	E.F	=	\$177	+	(0.022031	X	\$	_,
5970	DGSC	E.F	=	\$177	+	(0.028759	X	\$	_;
5975	DGSC	E.F	=	\$178	+	(0.028108	X	\$	_;
5977	DGSC	E.F	=	\$178	+	(0.009429	X	\$	_;
5995	DGSC	E.F	=	\$177	+	(0.022730	X	\$	_;
6105	DGSC	E.F	=	\$190	+	(0.024532	X		_;
6110	DGSC	E.F	=	\$178	+	(0.027671	X		_;
6115	DGSC	E.F	=	\$190	+	(0.037245	X		-).
6116	DGSC	E.F	=	\$186	+	(0.025119	X		-)*
6120	DGSC	E.F	=	\$186	+	•	0.024941	X		-,
6125	DGSC	E.F	=	\$186		(0.024801	X		'
6130	DGSC	E.F	*	\$190		(0.032556 0.007402	X		-'
6135	DGSC	E.F	2	-		(0.007402	X		'
6140	DGSC	E.F	=		+	(0.031832	X		'
6150	DGSC	E.F	2		+	•	0.021270	X)
6210	DGSC	E.F			+		0.027670	X		-,
6220	DGSC DGSC	E.f	=		+		0.022410	X		-,
6230 6240		E.F	-		+		0.018300	X		' '
6250	DGSC DGSC	E.F	-		+		0.026936	×		一, ,
6260	DGSC	E.F E.F	-		•		0.020738	X		
6310	DGSC	E.F	_		•		0.025119	, X		
6320	PGSC	E.F	=		•	. (0.020455	,)		-,
6330	PGSC	E.F	-			. (0.025119	,		— <u>'</u> ,*
6340	DGSC	E.F	-			. (0.014983	×		-;
6350	DGSC	E.F	=			. (0.035832	X		一;
6605	DGSC	E.F	-		٠	. (0.001158	×		-,
6610	DGSC	E.F				. (0.002936	X		-,
6615	PGSC	E.F	-		٠	. (0.060636)		;
6620	DGSC	E.F	•		•		0.006914	, X		_ <u>'</u>
0020	763C	E. r	-	4100	•	•	0.000714	•	·	'

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		EVALUAT							PROPOSED
FSC	CENTER			ADMINISTRATIVE	+	(PROPORTION	X	-
		SHPPNG	ROD	COST					VALUE
6635	DGSC	E.F	=	\$180	+	(0.020625	X	\$)
6636	DGSC	E.F	=	\$180	+	(0.025119	X	\$
6645	DGSC	E.F	=	\$180	+	(0.037345	X	\$)
6650	DGSC	E.F	=	\$180	+	(0.001134	X	\$)
6655	DGSC	E.F	=	\$180	+	(0.025119	X	\$)*
6660	DGSC	E.F	=	\$180	+	(0.021744	X	s)
6665	DGSC	E.F	=	\$180	+	(0.020123	X	
6670	DGSC	E.F	=	\$180	+	(0.012850	X	
6675	DGSC	E.F	=	\$180	+	(0.040056	X	
6680	DGSC	E.F	2	\$180	+	(0.027569	X	
6685	DGSC	E.F	=	\$180	+	(0.041986	X	\$)
6695	DGSC	E.F	=	\$180	+	(0.008409	X	
6710	DGSC	E.F	*	\$180	+	(0.000132	X	
6720	DGSC	E.F	=	\$180	+	(0.014482	X	
6730	DGSC	E.F	=	\$180	+	(0.023189	X	
6740	DGSC	E.F	=		+	(0.054219	X	
6750	DGSC	E.F	=		+	(0.021853	X	
6760	DGSC	E.F	=	- 1.00		(0.021695	X	
6770	DGSC	£.F	=			(0.025119	X	
6780	DGSC	E.F	=		+	(0.004257	X	
6810	DGSC	E.F	=	• • • •		(0.031637	X	
6820	DGSC	E.F	=	\$190	+	(0.000623	×	(\$)
6830	DGSC	E.F	=	\$190	+	(0.054045)	
6840	DGSC	E.F	=	\$190		(0.052346	X	
6850	DGSC	E.F	=	\$190	+	(0.016651)	
6910	DGSC	E.F	=	\$181	+	(0.025119	×	
6920	DGSC	E.F	=	\$181	+	(0.006749)	
6930	DGSC	E.F	=	\$181	+	(0.075920)	
6940	DGSC	E.F	3	\$181	+	(0.025119)	-
7240	DGSC	E.F	=	\$181	+	(0.000498)	
7310	DGSC	E.F	=	\$190	+	(0.026965)	
7320	DGSC	E.F	3	• • • • • • • • • • • • • • • • • • • •	+	(0.022062)	
7330	DGSC	E.F	•	\$190	+	(0.000942)	
7360	DGSC	E.F			+	•	0.000134)	(\$)
7450	DGSC	E.F	•	\$181	+	(0.000818)	(\$)
7610	DGSC	E.F	•	\$183	+	• (0.079313)	(\$)
7630	DGS	E.F	=	\$183	+	(0.025119)	(\$)*
7640	DGSC	E.F	•	\$183	+	(0.025119)	
7650	DGSC	E.F	3	\$183	+	•	0.025119	>	(\$)*
7660	DGSC	E.F		\$183	+	•	0.025119)	(\$)*
7670	DGSC	E.F	*	\$183	+	• (0.022434)	(\$)
7690	DGSC	E.F	•	\$183	+	• (0.037161)	(\$)

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		EVALUATION							PROPOSED
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG ROD		COST					VALUE
8110	DGSC	E.F	=	\$181	+	(0.005649	X	\$)
8120	DGSC	E.F	=	\$181	+	(0.012299	X	\$)
8125	DGSC	E.F	=	\$181	+	(0.001548	X	\$)
8130	DGSC	E.F	=	\$181	+	(0.025119	X	\$
8140	DGSC	E.F	=	\$181	+	(0.121284	X	\$>
8145	DGSC	E.F	=	\$181	+	(0.025119	X	\$
9110	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
9150	DGSC	E.F	=	\$181	+	(0.015493	X	\$)
9160	DGSC	E.F	=	\$181	+	(0.017223	X	\$)
9320	DGSC	E.F	=	\$190	+	(0.035782	X	\$)
9330	DGSC	E.F	=	\$190	+	(0.014517	X	\$)
9340	DGSC	E.F	=	\$190	+	(0.001642	X	\$>
9350	DGSC	E.F	=	\$190	+	(0.076077	X	\$)
9390	DGSC	E.F	2	\$190	+	(0.013207	X	\$)
9440	DGSC	E.F	=	\$181	+	(0.025119	X	\$>*
9450	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
9620	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*
9925	DGSC	E.F	=	\$181	+	(0.017298	X	\$>
9930	DGSC	E.F	=	\$181	+	(0.012563	X	\$)
9999	DGSC	E.F	=	\$181	+	(0.025119	X	\$)*

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		EVALUATI	ON						PROPOSED	
FSC	CENTER	FACTOR F	PER = A	DMINISTRATIVE			PROPORTION	x		
		SHPPNG R		COST		•			VALUE)
									TALUL	
15/0										
1560	DISC	E.F	=	\$198	+	• (0.029040	X	\$	_)
1670	DISC	E.F	=	\$198	+	• (0.012293	X	\$	_)
1680	DISC	E.F	*	\$198	+	• (0.041064	X	\$	_)
2020	DISC	E.F	=	\$186	+	• (0.037890	X	\$	_)*
2030	DISC	E.F	=	\$186	+	• (0.116047	X	\$	_)
2040	DISC	E.F	=	\$186	+	• (0.004444	X	\$	_)
2810	DISC	E.F	=	\$198	+	• (0.000454	X	\$	_)
2835	DISC	E.F	=	\$198	+	(0.003024	X	\$	_)
2840	DISC	E.F	=	\$198	+	(0.022068	X	\$	_)
2845	DISC	Ē.F	=	\$198	+	(0.037890	X	\$	_)*
2915	DISC	E.F	2	\$186	+	(0.026375	X	\$	_)
2925	DISC	E.F	=	\$186	+	(0.025313	X	\$	_)
2935	DISC	E.f	=	\$186	+	(0.003634	X	\$	_,
2945	DISC	E.F	2	\$186	+	(0.023492	X	\$	-)
2950	DISC	E.F	2	\$186	+	(0.037890	X	\$	_)*
2995	DISC	E.F	=	\$186	+	(0.025287	X	\$	_)
3110	DISC	E.F	=	\$187	+	(0.041485	X	\$)
3120	DISC	E.F	=	\$187	+	(0.045099	X	\$)
3130	DISC	E.F	=	\$187	+	(0.071393	X	\$)
3940	DISC	E.F	=	\$186	+	(0.064501	X	\$)
4010	DISC	E.F	=	\$183	+	(0.046250	X	\$	-)
4020	DISC	E.F	=	\$183	+	(0.036945	X	\$	-)
4030	DISC	E.F	2	\$183	+	(0.054899	X	\$	- <i>'</i>)
5305	DISC	E.F		\$183	+	(0.033351	X	\$	-)
5306	DISC	E.F	*	\$183	+	(0.043349	X	\$	·)
5307	DISC	E.F	2	\$183	+	(0.032426	X	\$	· }
5310	DISC	E.F	=	\$183	+	(0.032922	X	\$	·)
5315	DISC	E.F	=	\$183	+	(0.033377	X	\$.')
5320	DISC	E.F	2	\$183	+	(0.034746	X	\$.,)
5325	DISC	E.F	=	\$183	+	(0.035057	X	\$.,)
5330	DISC	E.F	=	\$183	+	(X	\$.,)
5335	DISC	E.F	2	\$183	+	(X	s	.,)*
5340	DISC	E.F	2	\$183	+			X	\$)
5355	DISC	E.F	=	\$183	+	•		X	\$	
5360	DISC	E.F	2	\$183	+	ì		X	. ———)
5365	OISC	E.F	=	\$183	+	ì		X		<i>,</i>)
6145	DISC	E.F	=	\$179		•		X		
9505	DISC	E.F	2	\$198		ì		X)
9510	DISC	E.F				ì		X)
9515	DISC	E.F	*		+		_	X)
9520	DISC	E.F	*			ì		X	. ————)
9525	DISC	E.F	2		+			^ K)
				• • • • • • • • • • • • • • • • • • • •	-	•		•	\$)

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of everage contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATIO	N						PROPOSED	
FSC	CENTER	FACTOR PE	R =	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG RO	00	COST					VALUE	
9530	DISC	£. F	=	\$198	+	(0.042510	X	\$	_)
9535	DISC	E.F	=	\$198	+	(0.039368	X	\$	_)
9540	DISC	E.F	=	\$198	+	(0.053892	X	\$	_)
9545	DISC	E.F	=	\$198	+	(0.037890	X	\$	_)*
9610	DISC	E.F	=	\$186	+	(0.037890	X	\$	_)*
9630	DISC	E.F	=	\$186	+	(0.076189	X	\$	_)
9640	DISC	E.F	=	\$186	+	(0.037890	X	\$	_)*
9650	DISC	E.F	=	\$186	+	(0.000023	X	\$)
9660	DISC	E.F	=	\$186	+	(0.037890	X	\$)*
9670	DISC	E.F	=	\$186	+	(0.037890	X	\$	_)*
9680	DISC	E.F	=	\$186	+	(0.037890	X	s)*

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

		EVALUATION							PROPOSED
FSC	CENTER	FACTOR PER	=	ADMINISTRATIVE	+	(PROPORTION	X	CONTRACT)
		SHPPNG ROD		COST					VALUE
6505	DPSC-M	E.F	=	\$136	٠	(0.009570	X	• ,
6508	DPSC-M	E.F	=		+	ì	0.001660	X	<u> </u>
					. *	•		X	,
6510	DPSC-M	E.F	=	\$136	*	(0.005959		•
6515	DPSC-M	E.F	=	\$136	+	(0.052299	X	\$)
6520	DPSC-M	E.F	=	\$130	+	(0.028833	X	\$)
6525	DPSC-M	E.F	=	\$130	+	(0.011999	X	\$)
6530	DPSC-M	E.F	=	\$132	+	(0.024022	X	\$)
6532	DPSC-M	E.F	=	\$127	+	(0.008714	X	\$)
6540	DPSC-M	E.F	=	\$130	+	(0.061925	X	\$)
6545	DPSC-M	E.F	=	\$133	+	(0.032089	X	\$)*
6550	DPSC-M	E.F	=	\$136	+	(0.041594	X	\$)
6630	DPSC-M	E.F	=	\$130	+	(0.018999	X	\$>
6640	DPSC-M	E.F	#	\$136	+	(0.023812	X	\$)
8105	DPSC-M	E.F	=	\$133	+	(0.165785	X	\$)
8820	DPSC-M	E.F	=	\$133	+	(0.032089	X	\$)*
8940	DPSC-M	E.F	=	\$133	+	(0.031459	X	\$)
9410	DPSC-M	E.F	=	\$133	+	(0.032089	X	\$)*

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		EVALUAT	ION						PROPOSED	
FSC	CENTER	FACTOR	PER =	ADMINISTRATIVE	+ ((PROPORTION	X	CONTRACT)
		SHPPNG	ROD	COST					VALUE	
7210	DPSC-T	E.F	=	\$235	+ (•	0.007160	X	s	_>*
8305	DPSC-T	E.F	=	\$235	+ 1	(0.007160	X	\$	_>*
8310	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8315	DPSC-T	E.F	=	\$235	+	(0.024291	X	\$	_)
8320	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8325	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8330	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8335	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8340	DPSC-T	E.F	=	\$235	+	(0.013212	X	\$	_)
8345	DPSC-T	E.F	=	\$235	+	(0.007160	X	\$	_)*
8405	DPSC-T	E.F	=	\$236	+	(0.003203	X	\$	_)
8410	DPSC-T	E.F	=	\$236	+	(0.007160	X	\$	_)*
8415	DPSC-T	E.F	=	\$214	+	(0.007971	X	\$	_)
8420	DPSC-T	E.F	=	\$236	+	(0.003438	X	\$)
8425	DPSC-T	E.F	=	\$233	+	(0.007160	X	\$	_)*
8430	DPSC-T	E.F	=	\$246	+	(0.000096	X	\$	
8435	DPSC-T	E.F	=	\$246	+	(0.007160	X	\$	_)*
8440	DPSC-T	E.F	=	\$236	+	(0.007160	X	\$	_)*
8445	DPSC-T	E.F	=	\$233	+	(0.007160	X	\$	_)*
8450	DPSC-T	E.f	=	\$233	+	(0.007160	X	\$	_)*
8455	DPSC-T	E.F	=	\$236	+	(0.000300	X	\$	
8460	DPSC-T	E.F	=	\$233	+	(0.007160	X	\$	_)*
8465	DPSC-T	E.F	=	\$214	+	(0.007160	X	\$	
8470	DPSC-T	E.F	=	\$233	+	(0.003937	X	\$	_,
8475	DPSC-T	E.F	=		+	•	0.007160	X	\$	
9420	DPSC-T	E.F	4			•	0.007160	X		
9430	DPSC-T	E.F		\$235	+	Ì	0.007160	X	\$	

^{*} There were no historical records reflecting closed shipping RCDs for this particular FSC. As a result, a "proportion of average contract value" could not be calculated. The proportion for the particular Center under which this FSC falls was utilized.

APPENDIX C

List of Abbreviations

Abbreviation	Meaning								
ACF	Active Contract File								
ACO	Administrative Contracting Officer								
CDCS	Customer Depot Complaint System								
DCAS	Defense Contract Administrative Service								
DCSC	Defense Construction Supply Center								
DDRV	Defense Depot Richmond Virginia								
DESC	Defense Electronic Supply Center								
DGSC	Defense General Supply Center								
DISC	Defense Industrial Supply Center								
DLA	Defense Logistics Agency								
DLA-LO	DLA Operations Research and Economic Analysis Office								
DoD	Department of Defense								
DPSC	Defense Personnel Support Center								
DPSC(C&T)	Defense Personnel Support Center - Clothing & Textile								
DPSC(Med)	Defense Personnel Support Center - Medical								
DRPM	Deficiency Report Program Manager								
EF	Evaluation Factor								
FSC	Federal Supply Class								
QAR	Quality Assurance Representative								
ROD	Report of Discrepancy								
SPD	Special Purpose Data								

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The Packard Commission has recommended that the government conduct its purchasing operations in a fashion similar to that of the private sector by emphasizing quality and schedule in addition to price. The Defense Logistics Agency's (DLA) Directorate of Contracting is examining the possibility of quantifying the costs associated with poor contractor performance and incorporating these costs into the bid evaluation process. In support of this effort, a project was initiated to evaluate the cost associated with discrepant supplies that are attributable to contractor fault. This study examined two elements of the cost of discrepant items and the resulting Report of Discrepancy (ROD) processing: specifically, the administrative cost and the holding cost.										
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